

**TECHNICAL WORK PLAN**

**SUPPLEMENTAL SITE ASSESSMENT ACTIVITIES**  
**3037 INDUSTRIAL PARKWAY**  
**SANTA MARIA, SANTA BARBARA COUNTY, CALIFORNIA**  
**(GLOBAL ID NO. SLT3S0301290)**

Prepared for:  
EFT Enterprises, L.P.

April 2019

April 1, 2019  
Project No. 1801-3361

Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, California 93401

Attention: Ms. Kelsey Gerhart, P.E.  
Water Resource Control Engineer

Subject: Technical Work Plan, Supplemental Site Assessment Activities, 3037 Industrial Parkway, Santa Maria, Santa Barbara County, California (Global ID No. SLT3S0301290)

Dear Ms. Gerhart:

Padre Associates, Inc., on behalf of EFT Enterprises L.P., has prepared this Technical Work Plan for supplemental site assessment activities at the subject site. If you have any questions or comments please contact Mr. Louis Cappel at (805) 786-2650, ext. 26 / [lcappel@padreinc.com](mailto:lcappel@padreinc.com).

Sincerely,

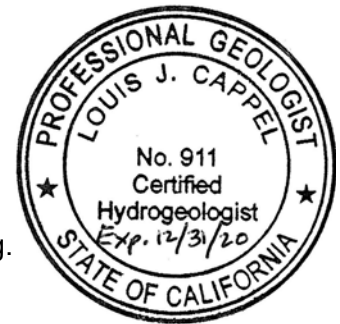
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cc: Ms. Fredda Evans, EFT Enterprises, L.P.  
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## 1.0 INTRODUCTION

Padre Associates, Inc. (Padre), on behalf of EFT Enterprises, L.P. (EFT), has prepared this Technical Work Plan (TWP) for supplemental assessment activities for the property identified as 3037 Industrial Parkway, Santa Maria, Santa Barbara County, California (Project Site). This TWP describes the scope of work and field procedures to assess soil, soil gas, and perched groundwater at the Project Site, and is being submitted to the California Regional Water Quality Control Board, Central Coast Region (RWQCB) for review and approval prior to implementation as required by the RWQCB in letters dated November 5, 2018 and December 27, 2018. The scope of work presented within this TWP is based on Padre's Site Conceptual Model (SCM) dated January 19, 2019, a meeting between the RWQCB and Padre that occurred on February 20, 2019, and recent groundwater monitoring data (March 2019). The State Water Resources Control Board has identified the Project Site as Global ID No. SLT3S0301290.

### 1.1 OVERVIEW

The Project Site is located within a commercial / industrial land use setting within the southwestern area of the City of Santa Maria, Santa Barbara County, California. The location of the Project Site is presented on Plate 1 - Site Location Map. An approximately 80,000 square foot facility located at the Project Site has been utilized for industrial manufacturing since at least the late 1980s. The Project Site is currently occupied by Atlas Copco Mafi-Trench, LLC. Pertinent features associated with the Project Site are illustrated on Plate 2 – Site Plan.

A 3,000-gallon underground storage tank (UST) historically used as a waste oil tank for the disposal of lightweight lubricants and solvents was removed at the Project Site in March 1989. Total petroleum hydrocarbon (TPH) and chlorinated volatile organic compound (VOC)-impacted soil surrounding the UST was reportedly excavated and bioremediated on-site prior to off-site disposal. Site assessment activities were initiated at the Project Site in 1989 to evaluate soil, perched groundwater, and the regional aquifer groundwater conditions in the area of the removed UST. To date, site assessment efforts have included soil, soil gas, as well as groundwater sampling, and routine groundwater monitoring (quarterly and later semi-annual).

Remediation of the dissolved-phase chlorinated VOC plume in perched groundwater associated with the removed UST was initiated in January 1994 with the construction of a groundwater extraction and treatment system. A soil vapor extraction system was constructed and began operation in October 2000 after the perched groundwater table was drawn down to provide a greater thickness of unsaturated soils and continued operating until May 31, 2018. Hydrogen peroxide was added into selected wells on several occasions between 2012 and 2014.

The remedial actions implemented at the Project Site appear to have successfully remediated the mass and extent of on-site contaminants in vadose zone soil and perched groundwater. Groundwater monitoring data indicates that selected VOCs exist in perched groundwater above State Maximum Contaminant Levels (MCLs) and the Notification Level (NL) for 1,4-dioxane in on-site groundwater monitoring well B-11 and off-site groundwater monitoring well B-10 (Padre, 2019b) (refer to Plate 4). Padre concluded that the trichloroethene (TCE)-impacted groundwater within the regional aquifer beneath the Project Site is likely associated with the former SEMCO facility located 255 feet northeast of the Project Site (Padre, 2019a and Padre, 2019b); therefore, EFT does not plan on assessing the regional aquifer at this time.

## 1.2 OBJECTIVES AND ASSESSMENT RATIONALE

The objectives of this TWP are provided below.

- **Remediation Confirmatory Assessment** - Confirm that chemicals of potential concern (COPCs) in soil at the former UST area (source area) at the Project Site have been remediated to acceptable concentrations that are protective of groundwater and human health. It should be noted that prior to in-situ soil remediation activities VOCs were not detected in soil samples at concentrations  $\geq$  U.S. Environmental Protection Agency (U.S. EPA) Regional Screening Levels for Residential Land Use (Residential RSLs). Soils have been assessed at the former UST site (source area) to depths of approximately 120 feet. The primary objective of this task is to assess the presence of 1,4-dioxane in soil because historical assessment activities did not analyze for this compound.
- **Perched Groundwater Assessment** - Delineate COPCs in perched groundwater hydrogeologically downgradient of off-site groundwater monitoring well B-10.
- **Vapor Intrusion Assessment** - Obtain the necessary sub-slab soil gas and indoor air sample laboratory analytical data to complete a vapor intrusion human health risk assessment.

## 1.3 SCOPE OF WORK SUMMARY

A summary of the scope of work is provided below. The proposed assessment locations are illustrated on Plate 8.

- **Remediation Confirmatory Assessment** – Advance one drill hole at the former UST location to facilitate the collection of discrete-depth soil samples for chemical analyses of COPCs. The drill hole will be advanced to a total depth of approximately 40 feet, which corresponds to the top of clay-rich soil zone that is likely associated with the perched groundwater at the Project Site.
- **Perched Groundwater Assessment** – Construct and sample one groundwater monitoring well located hydrogeologically downgradient of off-site groundwater monitoring well B-10.
- **Vapor Intrusion Assessment** – Construct two sub-slab soil gas probes within the main building at the Project Site, with one location adjacent to the former UST area and the second location adjacent to the current area of the highest concentrations of VOCs in perched groundwater (near groundwater monitoring well B-11). The sub-slab soil gas probes, along with indoor air, will be sampled on two occasions to evaluate any potential temporal trends.

## 1.4 TWP ORGANIZATION

This TWP is organized as follows: Section 2.0 presents background information, including a discussion of the Project Site location, surface water, geology, and hydrogeology, a summary of historical site assessment and remediation activities, the nature and distribution of chemicals of concern (COPCs) in soil, soil gas, and groundwater, and potential off-site sources of chlorinated

VOCs; Section 3.0 outlines the scope of the proposed assessment activities; and Section 4.0 provides the documents referenced in this TWP. Supporting information is included in tables and plates, which follow the text.

## **2.0 BACKGROUND**

### **2.1 SITE DESCRIPTION**

The Project Site is located within the northwest quarter of Section 34, Township 10 North, Range 34 West, San Bernardino Base and Meridian. Between 1942 and 1949, the Project Site was utilized as part of the Santa Maria Army Airfield. The Project Site was later transferred into private ownership. Currently, the Project Site is located within a commercial / industrial land use setting at 3037 Industrial Parkway, Assessor's Parcel Number (APN) 111-292-028, Santa Maria, Santa Barbara County, California. An approximately 80,000 square foot industrial facility located at the Project Site has been utilized since at least the late 1980s by the Mafi-Trench Company for the manufacturing of expander compressors and expander generators. The Project Site is currently occupied by Atlas Copco Mafi-Trench, LLC. Refer to Plate 2 for a plan view of the Project Site showing site features and previous assessment locations.

### **2.2 TOPOGRAPHY AND DRAINAGE**

Surface topography in the area of Project Site slopes gently toward the northwest. It is anticipated that the Project Site surface water drainage currently flows toward Industrial Parkway to the east and into the City of Santa Maria storm drain system. The Project Site is bordered to the south and west by a Santa Barbara County Flood Control District unlined floodway ditch / easement that conveys excess storm water from southeast to northwest (refer to Plate 2).

### **2.3 GEOLOGY**

#### **2.3.1 Regional**

The Project Site is located in the Santa Maria Valley, which is a sediment filled basin located between two structural provinces: the Southern California Coast Range (San Raphael Mountains) to the northeast and the Transverse Range (Santa Ynez Mountains) to the south. The San Raphael Mountains lie at the southern edge of the Coast Range, which consist of northwest-trending mountain ranges and valleys resulting from folds and faults of the same orientation. The Santa Ynez Mountains form the western part of the westward-trending Transverse Range and comprise folds and faults generally of the same orientation.

The Santa Maria Valley is located within the Los Osos kinematic domain of south-central coastal California (Lettis, W.R., et al, 2004). The Los Osos domain is characterized by west-northwest striking reverse faults that bound eight similarly trending structural blocks. The Santa Maria Valley structural block is at present a subsiding or locked sediment-filled basin (Lettis, W.R., et al, 2004).

Based on a review of the Thomas W. Dibblee, Jr. map titled *Geologic Map of the Santa Maria and Twitchell Dam Quadrangles*, dated 1994, the Project Site is underlain by Holocene to Pleistocene-age eolian and alluvial deposits composed of sand, gravel, silt, and clay to depths of approximately 1,700 feet. The alluvial deposits beneath the surficial eolian sand deposits include recent and older alluvium, and the Orcutt and Paso Robles Formations. Beneath these alluvial

units lies the Careaga Sand Formation, which is described as a weakly indurated sand of marine origin. Beneath the Careaga Sand Formation lies a sequence of highly compacted and silicified marine formations (Foxen, Sisquoc, and Monterey) of Tertiary-age porcelaneous and diatomaceous shale, along with sandstones, siltstones and mudstones. The Monterey Formation extends to approximate depths of at least 4,500 feet beneath the Project Site, where it is underlain by the Franciscan Basement Complex. The Monterey Formation is the primary oil-bearing geologic unit within the region.

### **2.3.2 Site-Specific**

The maximum depth of historical soil assessment activities completed by Woodward-Clyde Consultants (WCC) at the Project Site was approximately 215 feet (WCC, 1992). Earth materials encountered generally consisted of interbedded layers of sand, silt, silty sand, clayey sand and gravel. Soils observed in drill holes advanced at the Project Site are generally arranged in thin, laterally discontinuous, and often interbedded layers indicative of an alluvial depositional environment.

Padre interprets that the zone of low permeability that is likely responsible for the perched groundwater at the Project Site is associated with the following geologic characteristics:

- Clay-Rich Soils - According to a geophysical survey performed at the location of groundwater monitoring well B-4, clay-rich soils exist from approximately 39 feet to 49 feet below ground surface (bgs) (WWC, 1991). A review of drill hole logs (VE-1, DW-1, and B-4) supports the geophysical findings that fine-grained soils exist within this depth range.
- Very Dense Soils, Possibly Cemented Sand Layers – Based on a review of drill hole logs dense to very dense sands were observed between depths of approximately 25 feet to 40 feet bgs, which may indicate cemented sand layers.

## **2.4 HYDROGEOLOGY**

### **2.4.1 Regional**

The Project Site is located within the Santa Maria Valley Groundwater Basin (Basin) (Department of Water Resources [DWR], 2003). Groundwater within the Basin occurs in alluvium, dune sands, and the Orcutt Formation, Paso Robles Formation, Pismo Formation, and Careaga Sand (DWR, 2003). Groundwater conditions are unconfined within most of the Basin, except in the coastal portion where groundwater conditions are confined (DWR, 2003). The regional aquifer groundwater flow direction is toward the west-northwest. Historical water well records indicate that groundwater within the regional aquifer fluctuates between approximate depths of 90 feet to 220 feet. Discontinuous zones of perched groundwater are known to exist within the Basin.

### **2.4.2 Site-Specific**

Based on a review of historical groundwater assessment and monitoring data, the Project Site is underlain by a shallow, perched groundwater bearing zone, and a deep groundwater bearing zone (regional aquifer). The shallow perched groundwater beneath the Project Site and regional aquifer are separated by approximately 170 feet of unsaturated alluvial deposits.



Depths to groundwater within the shallow perched zone range from approximately 5 feet to 20 feet. Groundwater within this shallow zone appears to be laterally discontinuous based upon dry drill holes / monitoring wells completed at the northern and western periphery of the Project Site (B-7 and B-9). The groundwater flow direction within the perched groundwater zone is toward the west to southwest. During the operation of the remediation system the groundwater flow direction was reported to flow toward the northwest at times. One deep groundwater monitoring well was constructed within the regional aquifer beneath the Project Site (DW-1). Depth to groundwater within well DW-1 in March 2019 was approximately 194 feet.

## **2.5 HISTORICAL SITE ASSESSMENT AND REMEDIATION ACTIVITIES**

Historical site assessment and remediation activities performed at the Project Site are summarized below. Refer to Table 1 for a summary of the monitoring well construction details. Refer to Table 2 for a summary of soil sample analytical results for selected VOCs and TPH. Table 3 summarizes data from the March 2019 groundwater monitoring event. Table 4 summarizes groundwater sample analytical results for selected VOCs and TPH. Refer to Plate 4 for the perched groundwater distribution of selected VOCs for March 2019. A site plan showing the locations of geologic cross-sections A-A' and B-B' is illustrated on Plate 5, and geologic cross sections A-A' and B-B' are illustrated on Plates 6 and 7, respectively.

For the purposes of this discussion, Padre compared soil analytical results to Residential RSLs and Industrial RSLs. TPH results for soil were compared to the Santa Barbara County Environmental Health Services screening levels for residential sites (100 milligram per kilogram [mg/kg]) and industrial sites (1,000 mg/kg). Groundwater analytical results are compared to MCLs and NLs.

A 3,000-gallon UST historically used as a waste oil tank for the disposal of lightweight lubricants and solvents was removed in March 1989. TPH and chlorinated VOC-impacted soil surrounding the UST was reportedly excavated and bioremediated on-site prior to off-site disposal.

Site assessment activities were initiated at the Project Site in 1989 by Woodward-Clyde Consultants (WCC) of Santa Barbara, California to evaluate soil and groundwater conditions in the area of the removed UST. In May and December 1989, a total of seven soil samples (Sample Nos. 1 through 5, EX-1 and EX-2) were collected from the limits of the UST excavation and chemically analyzed for COPCs. Maximum soil concentrations in the excavation soil samples included 1,1,1-TCA at 130 mg/kg (Sample No. 1), and TPH at 9,000 mg/kg (Sample No. 2). Between December 1989 and July 2011, a total of 36 soil samples were collected from 15 drill holes advanced at the Project Site and chemically analyzed for chlorinated VOCs (12 of which were analyzed for TPH). Aside from two TPH concentrations indicated in soil samples collected from the UST excavation limits (Sample No. 1 at 760 mg/kg and Sample No. 2 at 9,000 mg/kg), chlorinated VOCs and TPH have not been identified in soil at concentrations above established screening levels.

A groundwater monitoring well network was gradually constructed beginning during assessment activities in 1989. Routine groundwater monitoring (quarterly and later semi-annual) has been performed using the network of both on-site and off-site monitoring wells between 1989 and present day. Between December 1989 and March 2019, a total of 333 individual groundwater

samples were collected from nine monitoring wells. Early, maximum concentrations of chlorinated VOCs in perched groundwater were 19,000 µg/L 1,1,1-TCA (well B-3 on May 21, 1990) and 3,900 µg/L 1,1-dichloroethene (1,1-DCE) (well B-3 on January 16, 1991). 1,4-dioxane was detected at a maximum concentration of 130 µg/L in groundwater monitoring well B-6 (December 2003) and was recently detected at a maximum concentration of 18 µg/L in groundwater monitoring well B-11 (March 2019).

In February 1991 WCC performed soil gas assessment activities at the Project Site, which included the construction and sampling of 22 soil gas probes located on the property and along the floodway easement to the west. Given the methods used during the subject assessment, the soil gas probes were not constructed in accordance with current industry standards or DTSC guidelines. The soil gas probes were reportedly constructed at sampling depths of 3 to 4 feet. An on-site mobile laboratory chemically analyzed the 22 soil gas samples for light volatile organic compounds (LVOCs), 1,1,1-TCA, TCE and PCE. The results of the soil gas assessment indicated 1,1,1-TCA as the primary soil gas contaminant (most elevated concentrations) with a maximum concentration of 15,000 parts per billion by volume (ppbv) detected in Probe No. 12, proximal to the former UST location. Detectable concentrations of TCE and PCE were also reported in 16 samples and 7 samples, respectively. Elevated LVOC concentrations generally coincided with elevated 1,1,1-TCA concentrations. The chlorinated VOCs in soil gas were identified at peak concentrations near the former UST site, with impacts extending to the north and west beneath the industrial building, and off-site to the southwest (which was down gradient with respect to shallow groundwater in February 1991).

Remediation of the dissolved-phase chlorinated VOC plume in shallow groundwater began in January 1994 with the construction of a groundwater extraction and treatment system. A soil vapor extraction system began operation in October 2000 after the perched groundwater table was drawn down to provide a greater thickness of unsaturated soils. Hydrogen peroxide was introduced into select wells on several occasions between 2012 and 2014. The soil vapor extraction system was operated more recently on a cyclic basis (alternating extraction wells) until May 31, 2018, when the vapor extraction system was shut-down at the RWQCB's request to allow groundwater monitoring under static conditions.

It appears that the remedial actions implemented at the site have successfully remediated the mass and extent of on-site contaminants in shallow, perched groundwater. However, peripheral and off-site monitoring wells B-10 and B-11 (constructed in perched groundwater zone) continue to be indicated with chlorinated VOCs above MCLs and 1,4-dioxane above its NL. A groundwater sample collected in 2019 from a deep monitoring well screened within the regional aquifer beneath the Project Site (DW-1) indicated TCE and cis-1,2-DCE at concentrations exceeding MCLs.

## **2.6 NATURE AND DISTRIBUTION OF COPCs**

Presented below is a discussion of the nature and distribution of COPCs in soil, soil gas, and groundwater beneath the Project Site.

### **2.6.1 Soil**

Soils have been assessed at the former UST site (source area) to depths of approximately 120 feet. Chlorinated VOCs have not been identified in soil at concentrations ≥ RSLs. TPH was

indicated in Sample Nos. 1 and 2 collected from the former UST excavation limits at concentrations of 760 mg/kg and 9,000 mg/kg, respectively. TPH concentrations above established screening levels appear to be limited to the area of the former UST.

## **2.6.2 Soil Gas**

Based on the results of the soil gas assessment completed in February 1991 (pre-in-situ remediation), 1,1,1-TCA was identified as the primary soil gas contaminant with a maximum concentration of 15,000 ppbv detected in Probe No. 12, proximal to the former UST location (refer to Appendix E). Detectable concentrations of TCE and PCE were also reported in 16 samples and 7 samples, respectively. Elevated LVOC concentrations generally coincided with elevated 1,1,1-TCA concentrations. The chlorinated VOCs in soil gas were identified at peak concentrations near the former UST site.

## **2.6.3 Groundwater**

Chlorinated VOC impacts have been identified beneath the Project Site in both shallow, perched groundwater, and the regional aquifer. Presented below is a discussion of the current groundwater conditions based on available data.

### **2.6.3.1 Perched Groundwater**

Chlorinated VOCs (1,1-DCA, 1,1-DCE and 1,2-EDC) and 1,4-dioxane at concentrations  $\geq$  MCLs / NL exist in perched groundwater at a localized area at the southwest margin of the Project Site (well B-11), extending off-site to the southwest (well B-10). The VOC impacts to perched groundwater at this location are not delineated towards the west-southwest (refer to Plate 4).

### **2.6.3.2 Regional Aquifer**

Limited data exists for the regional aquifer at the Project Site. On three occasions (May 1992, March 2017, and March 2019) groundwater samples collected from the deep monitoring well at the Project Site (DW-1) indicated TCE concentrations exceeding the MCL. The result of the March 2019 sampling event indicated TCE above its MCL. It should be noted that VOC 1,4-dioxane was analyzed within the regional aquifer well DW-1 for the first time in March 2019 where it was not present at a detectable concentration.

## **2.7 OFF-SITE SOURCES OF VOCs**

### **2.7.1 Perched Groundwater**

There does not appear to be a potential off-site source for the identified chlorinated VOC-impacted perched groundwater in the area of off-site monitoring wells B-10 and B-11 given the distance of potential off-site sources and discontinuous nature of the perched groundwater in the area of the Project Site. The chlorinated VOC-impacts at the location of wells B-10 and B-11 are likely associated with a detached or cut-off plume that originated at the Project Site in the area of the former UST location.

### **2.7.2 Regional Aquifer**

At this time, data suggests that it appears historical activities at the Project Site have not impacted the regional aquifer. The former SEMCO facility located 255 feet northeast of the Project Site is the likely source of chlorinated VOC contamination within the regional aquifer

beneath the Project Site (Padre, 2019a). Documented VOC contamination (TCE and cis-1,2-DCE) from the SEMCO site is chemically similar to the detections within on-site deep monitoring well DW-1. Additionally, the maximum concentration of TCE in perched groundwater (B-3 at 7.0 µg/L) at the Project Site is an order of magnitude lower than the maximum detection of TCE within the regional aquifer (DW-1 at 60.1 µg/L) at the Project Site. The maximum concentration of TCE detected at the SEMCO site is 33,000 µg/L (August 1995).

### **3.0 ASSESSMENT METHODOLOGY**

#### **3.1 PRE-FIELD ACTIVITIES**

##### **3.1.1 Site-Specific Health and Safety Plan**

Padre will prepare a site-specific health and safety plan (HASP) for the anticipated field activities. The HASP will include procedures, equipment, and materials/supplies to be utilized to protect worker and community health and safety during the course of the anticipated field activities. The HASP will meet or exceed the requirements set by OSHA's Occupational Health and Safety Standards CFR 29, subpart 1910.120(b)(4).

##### **3.1.2 Off-Site Access**

An access agreement will be obtained prior to field activities for the planned off-site groundwater monitoring well location.

##### **3.1.3 Permitting**

The required groundwater monitoring well permit will be obtained from the County of Santa Barbara Environmental Health Services (EHS).

##### **3.1.4 Underground Service Alert and Private Utility Locator**

The proposed assessment locations will be delineated with white paint, and Underground Service Alert will be contacted at least 48 hours prior to the commencement of field activities. Padre will also contract a private utility locator to evaluate the areas of the planned assessment.

##### **3.1.5 Agency Notification**

Padre will notify the RWQCB at least 48 hours prior to initiating field activities, as well as EHS to comply with the well permit requirements.

#### **3.2 REMEDIATION CONFIRMATORY ASSESSMENT AND PERCHED GROUNDWATER ASSESSMENT**

Padre will observe and document the advancement of two drill holes, and the subsequent construction of one, 2-inch diameter, PVC groundwater monitoring well if groundwater is present (refer to Plate 8). Each drill hole will be advanced using a hollow-stem auger drilling rig operated by a C-57 licensed drilling contractor. Drill holes will be cleared to approximate depths of 5 feet utilizing a manually advanced hand auger.

The drill hole associated with the remediation confirmatory soil assessment will be advanced to a total depth of approximately 40 feet (top of clay-rich soil zone). The drill hole that is proposed to be constructed as a groundwater monitoring well will be advanced to approximately 10 feet beyond first encountered groundwater or to a maximum depth of 40 feet (top of clay-rich

soil zone). If groundwater is not encountered, then the drill hole will be abandoned as described within this section.

Soil samples will be collected at 5-foot intervals to the total depth of the drill hole starting at 5 feet using a modified California split-spoon sampler driven with a 140-pound hammer. Soil Samples will be collected in stainless steel sleeves, which will be capped on both ends with Teflon™ tape and plastic end caps. Each sample will be appropriately labeled and immediately placed on ice in a chilled cooler. Chain-of-custody forms will be used to document sample management procedures. Soil samples will be geologically logged by Padre using the Unified Soil Classification System (USCS), and will be screened for the presence of VOCs using a photo-ionization detector (PID).

The confirmatory remediation assessment drill hole will be abandoned by placing bentonite grout from the bottom of the drill hole to within approximately 6-inches of grade. The bentonite grout will be placed through the augers, which will be used as a tremie pipe. The ground surface will be repaired to match the adjacent ground surface. If groundwater is not encountered within the drill hole proposed to be constructed as a groundwater monitoring well, then this drill hole will be abandoned using the aforementioned method.

If groundwater is present, then the drill hole will be completed as a groundwater monitoring well, constructed with 2-inch diameter, schedule 40 PVC casing. The monitoring well will be screened with approximately 15 feet of 0.020-inch factory slotted screen casing (5 feet above first groundwater and 10 feet below first groundwater). Blank casing will be used to complete the well from the top of the screened portion to grade. The drill hole annulus will be backfilled with the appropriate filter pack sand from the bottom of the drill hole to approximately 2 feet above the screened portion. The filter pack material will be settled by surging the well with a surge block. Any settlement will be compensated for by adding more sand prior to the placement of the bentonite seal. Bentonite pellets will be placed on top of the upper filter pack to approximately 1-foot below grade and hydrated in-place. The remaining annular space to the ground surface will be filled with concrete. The groundwater monitoring well will be completed at the ground surface with a flush mounted roadway well box. Following the construction of the groundwater monitoring well, the well will be developed by a combination of surging and bailing.

Padre proposes to perform a supplemental groundwater monitoring event following the construction of the proposed groundwater monitoring well, where all groundwater monitoring wells will be gauged and sampled using low-flow sampling techniques.

### **3.1 VAPOR INTRUSION ASSESSMENT ACTIVITIES**

Padre will perform vapor intrusion assessment activities at the Project Site. Padre will construct two soil gas probes within the main building at the Project Site, with one location adjacent to the former UST area and the second location adjacent to the current area of the highest concentrations of VOCs in perched groundwater (near groundwater monitoring well B-11) (refer to Plate 8). The sub-slab soil gas probes, along with indoor air, will be sampled on two occasions to evaluate any potential temporal trends. The construction and sampling of the soil gas probes and indoor air will be performed in accordance with DTSC's *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* (2011) and DTSC's *Advisory - Active Soil Gas Investigation* (DTSC, 2015).

### **3.1.1 Sub-Slab Soil Gas Probe Construction**

A rotary hammer will be used to drill a small-diameter hole (approximately 0.5 to 1 inch) through the concrete slab 3 to 4-inches into the underlying engineered fill material. All drill cuttings will be removed from the drill hole. The sub-slab soil gas probe porous tip and tubing will be inserted into the drill hole at a depth that corresponds to the middle of the engineered fill material beneath the concrete slab, and clean sand will be placed to cover the tip of the probe with approximately 1-inch of sand. Dry granular bentonite will then be placed on top of the filter pack to a depth of slightly above the top of the engineered fill / bottom of concrete slab contact. An approximate 1-inch hydrated bentonite seal will then be placed above the dry granular bentonite. The remainder of the drill hole will be sealed with neat cement. The sub-slab soil gas probe will be completed at the ground surface with a gas-tight fitting that is flush with the ground surface so that the probe completion is not a tripping hazard. The annular seal will be allowed to set approximately 2 hours prior to performing soil gas sampling activities. After the vapor intrusion assessment activities have been deemed complete, the sub-slab soil gas probes will be removed and the drill holes will be backfilled with hydrated granular bentonite, and patched to match the adjacent ground surface.

### **3.1.2 Sub-Slab Soil Gas Sampling Activities**

To allow for the subsurface to equilibrate to representative conditions, Padre will allow the soil gas probes to equilibrate for at least 2 hours after their construction. Soil gas sampling activities will not occur during the course of a significant rain event, and will only occur after five days without a significant rain event. A significant rain event is defined as 0.5-inch or greater amount of rainfall during a 24-hour period. Barometric pressure fluctuations associated with the passage of frontal systems may introduce atmospheric air into the shallow vadose zone. Therefore, soil gas sampling activities will be delayed until frontal systems have passed the area of the Project Site.

A shut-in test will be conducted to check for leaks in the aboveground soil gas probe fittings prior to collecting a soil gas sample. The shut-in test consists of assembling the aboveground sampling train and connecting an unused, clean soil gas sampling syringe downstream of all assembly connections and valves. The sampling train will have a correctly calibrated vacuum gauge (sensitive enough to indicate a pressure change of 0.5 inches of mercury [in Hg]) connected via a "T" fitting. Connections and valves will be checked for proper orientation and tightness. Vacuum is exerted on the system using the syringe until the gauge reads approximately -10 in Hg, and then all of the system valves are closed. In order to be used for soil gas sample collection, the sampling train must maintain the measured vacuum of approximately -10 in Hg for at least 1 minute of observation, and if there is any observable loss of vacuum, the fittings will be adjusted as needed until the vacuum in the above-ground portion of the sample train does not noticeably dissipate. After the shut-in test is completed and validated, the sampling train will not be altered.

Prior to soil gas sample collection, the soil gas probes will be appropriately purged to remove at least three times the volume of air contained within the tubing and filter pack pore space (approximately 100 milliliters).

The soil gas samples will be collected in 100% individually-certified "clean" 1-liter SUMMA canisters at an approximate flow rate of 200 milliliters per minute. A leak detection compound

such as 1,1-difluoroethane (1,1-DFA) will be utilized to indicate a leak in the system. Typically, the leak detection compound is sprayed onto towels that are placed near the soil gas sampling assembly valves and connections. The soil gas samples collected within the SUMMA canisters will be chemically analyzed for a leak detection compound such as 1,1-DFA as part of the laboratory VOCs analyses to evaluate the soil gas probe assemblies and annular seal for potential leaks of ambient air.

The initial SUMMA canister vacuum reading (typically around -29 in Hg), canister serial number, and sample ID will be recorded prior to opening the SUMMA canister valve and initiating sample collection. The valve to the SUMMA canister will be opened and sampling will continue until vacuum remaining in each SUMMA canister reaches approximately 0 to -2 in Hg. Upon completion of the soil gas sample collection, the valve to the SUMMA canister will be closed, and the final vacuum and sample time will be recorded. The SUMMA canisters will be sealed, labeled, and secured for transportation. Standard COC procedures will be used in sample collection and transportation to the analytical laboratory.

### **3.1.3 Air Sampling Activities**

Indoor air samples will be collected in individually 100% laboratory-certified “clean” 6-liter SUMMA canisters provided by the laboratory. Indoor air samples will be collected over an approximate 24-hour period. The fill time of each SUMMA canister will be recorded by the sampling personnel on-site observing the SUMMA canisters. At indoor air sample collection locations, the SUMMA canister / flow regulator assembly will be set at a height of approximately 4 feet above the ground surface.

The initial SUMMA vacuum reading (typically around -29 inches of Hg), canister serial numbers, and air sample ID will be recorded prior to opening the valve and initiating sample collection. The valve to the SUMMA canisters will be opened and sampling will continue until vacuum remaining in each SUMMA canister reaches approximately 0 inches of Hg. Upon completion of sampling, the valves to the SUMMA canister will be closed, the final vacuum and sample time will be recorded, and the SUMMA canister will be sealed, labeled, and secured for transportation. Standard COC procedures will be used in sample collection and transportation to the analytical laboratory.

## **3.2 LABORATORY ANALYTICAL PROGRAM**

### **3.2.1 Soil and Groundwater Samples**

All soil and groundwater samples will be chemically analyzed by a State of California certified laboratory for the following compounds:

- TPH by U.S. EPA Method 8015 modified with carbon chain breakdown (C13-C22 and C23-C40);
- VOCs by U.S. EPA Method 8260B; and
- 1,4-dioxane by U.S. EPA Method 1625 GC/MS SIM.

### **3.2.2 Sub-Slab Soil Gas and Indoor Air Samples**

All sub-slab soil gas and indoor air samples will be chemically analyzed by a State of California certified laboratory for the following compounds:

- VOCs by U.S. EPA Method 8260B; and
- 1,4-dioxane by U.S. EPA Method 1625 GC/MS SIM.

### **3.3 DECONTAMINATION PROCEDURES**

Non-dedicated field equipment will be cleaned before use, between drill hole and sample collection locations, and after completion of field work. Cleaning procedures for sampling equipment will include a non-phosphate detergent wash, two rinses with tap water, and a final distilled or deionized water rinse. The auger flights will be pressure-washed after the completion of each drill hole.

### **3.4 ASSESSMENT-DERIVED WASTES**

Assessment-derived wastes will consist of decontamination water, purged groundwater, and soil cuttings, which will be stored in properly labeled 55-gallon drums. All assessment-derived waste will be stored at the Project Site pending appropriate transportation and disposal at an approved disposal facility.

### **3.5 SURVEY**

A California-licensed land surveyor will measure the elevation and relative location of each drill hole and well top of casing mark relative to a common benchmark to within  $\pm 0.01$  foot.

### **3.6 QUALITY ASSURANCE / QUALITY CONTROL**

The Quality Assurance / Quality Control (QA / QC) procedures will be utilized in both sample collection and chemical analyses. The purpose of the QA / QC procedures will be to ensure the reliability and compatibility of all data generated during the sampling program.

#### **3.6.1 Field QA / QC Procedures**

Field QA/QC procedures will be performed during the sampling program and consist of the following measures:

- Daily information regarding sample collection will be recorded on field data sheets and/or field logbooks. Sample types, sample identification numbers, and sample times will be collected and recorded on field data sheets and/or field logbooks;
- A shut-in test will be performed at each soil gas probe location prior to sample collection to ensure the air tight integrity of the soil gas sample train assembly;
- Leak detection testing will be performed at each soil gas probe location during the course of the sample collection activities to evaluate the soil gas probe assembly and annular space for leaks of ambient air;



- COC records will be utilized to document sample collection and submittal to the laboratory for analyses. A COC record will accompany all samples submitted for chemical analyses.

### **3.6.2 Laboratory QA / QC Procedures**

Laboratory QA / QC procedures include the following:

- Chemical analyses will be performed within the required holding time for all samples;
- A state-certified hazardous waste testing laboratory will conduct the required analysis;
- The laboratory will provide the following information for each sample:
  - Method blank data;
  - Surrogate recovery, instrument tuning, and calibration data; and
  - Signed laboratory reports including the sample designation, date of sample collection, date of sample analysis, laboratory analytical method employed, sample volume, and the minimum reporting limit (RL).

### **3.7 REPORT PREPARATION**

Following completion of the proposed field and laboratory analytical work, a supplemental site assessment report documenting field procedures and results will be prepared. The report will document the activities performed during the drilling and installation of groundwater monitoring wells and sub-slab soil gas probes, including a summary of field activities, copies of permits, boring logs / well completion diagrams, survey results, and laboratory results. The report will provide conclusions regarding the subsurface conditions encountered and path forward recommendations for the Project Site. The report will be signed and certified by a Professional Geologist registered in the State of California.

After completing two rounds of sub-slab soil gas and indoor air sampling, Padre will subcontract Intrinsik of Venice, California to prepare a vapor intrusion human health risk assessment. Soil gas screening levels will be derived using the indoor air screening levels (and therefore toxicity values) currently recommended by California EPA (Cal/EPA) DTSC Human and Ecological Risk Office (HERO) HHRA Note 3, DTSC-modified Screening Levels (Cal/EPA, 2017) and DTSC default attenuation factors (DTSC, 2011). Intrinsik will evaluate the potential human health risks for inhalation exposure to COPCs, which will be documented in a vapor intrusion human health risk assessment report.

The supplemental site assessment report and the vapor intrusion human health risk assessment report will be submitted to the RWQCB and uploaded to GeoTracker.

#### 4.0 REFERENCES

- California Department of Toxic Substances Control (DTSC), 2011, *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, Final – Revision 1*, Dated October 2011.
- DTSC, 2015, *Advisory – Active Soil Gas Investigations, Jointly Issued by the Regional Water Quality Control Board, Los Angeles Region, Regional Water Quality Control Board, San Francisco Bay Region and the Department of Toxic Substances Control*, dated July 2015.
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- WCC, 1991, *Results of Site Investigation and Remedial Action Feasibility Study for 3037 Industrial Parkway, Santa Maria, California*, dated December 12, 1991.
- WCC, 1991, *Results of Groundwater Resampling and Soil Gas Survey at 3037 Industrial Parkway, Santa Maria, California*, dated March 1991.
- WCC, 1992, *Results of Drilling and Sampling of Deep Well at 3037 Industrial Parkway, Santa Maria, California*, dated June 1, 1992.

## TABLES

**Table 1**  
**Summary of Well Construction Details**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Zone	Total Depth (feet bgs)	Drill Hole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet bgs)	Screen Slot Size (inches)	Top of Casing Elevation (feet AMSL)	Comments
B-3	Perched	17	10	4	3 - 17	0.020	234.39	Extraction Well
B-4	Perched	50	8	2	44.2 - 49.2	0.010	234.32	Monitoring Well
B-5	Perched	22.5	10	4	4.5 - 21.5	0.020	235.12	Extraction Well
B-6	Perched	21	10	4	4 - 20	0.020	234.99	Extraction Well
B-7	Perched	24	8	2	9 - 24	0.010	232.66	Monitoring Well
B-8	Perched	14	8	2	4 - 14	0.010	233.91	Monitoring Well
B-9	Perched	29.5	8	2	--	0.010	233.07	Monitoring Well
B-10	Perched	19	8	2	8 - 18	0.010	231.65	Monitoring Well
B-11	Perched	20.5	8	2	10.5 - 20.5	0.010	234.80	Monitoring Well
B-12	Perched	20.5	8	2	10.5 - 20.5	0.010	232.46	Monitoring Well
DW-1	Regional Aquifer	215	10	4	175 - 215	0.020	--	Monitoring Well
VE-1	Perched	23	10	4	7.5 - 22.5	0.020	234.70	Extraction Well

**Notes:**

bgs = below ground surface

AMSL = above mean sea level

-- = no data available

**Table 2**  
**Summary of Soil Sample Analytical Results**  
**Selected Chlorinated VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Sample ID	Sample Depth (feet)	Date Collected	1,1-dichloroethane (DCA)	1,2-dichloroethane (DCA)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Carbon Range Varies)
<b>Residential RSLs</b>			<b>3.6</b>	<b>0.46</b>	<b>230</b>	<b>160</b>	<b>1600</b>	<b>24</b>	<b>8100</b>	<b>0.94</b>	<b>0.059</b>	<b>100*</b>
<b>Industrial RSLs</b>			<b>16</b>	<b>2.0</b>	<b>1000</b>	<b>2300</b>	<b>23000</b>	<b>100</b>	<b>36000</b>	<b>6</b>	<b>1.7</b>	<b>1000*</b>
1 (S Bottom)	--	3/13/89	--	--	--	--	--	--	<b>130</b>	--	--	<b>760<sup>(1)</sup></b>
2 (W Wall)	--	5/26/89	--	--	--	--	--	--	<b>0.14</b>	--	--	<b>9000<sup>(1)</sup></b>
3 (NW Wall)	--	5/26/89	--	--	--	--	--	--	ND	--	--	ND <sup>(1)</sup>
4 (E Bottom)	--	5/26/89	--	--	--	--	--	--	ND	--	--	<b>20<sup>(1)</sup></b>
5 (E Wall)	--	5/26/89	--	--	--	--	--	--	ND	--	--	<b>19<sup>(1)</sup></b>
EX-1	8	12/12/89	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<30 <sup>(1)</sup>
EX-2	8	12/12/89	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<30 <sup>(1)</sup>
B1-7	7	12/12/89	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<30 <sup>(1)</sup>
B1-10	10	12/12/89	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<30 <sup>(1)</sup>
B2-3.5	3.5	12/12/89	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<30 <sup>(1)</sup>
B2-5	5	12/12/89	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<30 <sup>(1)</sup>
B3-4.5	4.5	12/12/89	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<30 <sup>(1)</sup>
B3-9.5	9.5	12/12/89	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<30 <sup>(1)</sup>
B4-38.6	38.6	5/15/90	<0.002	<0.002	<b>0.012</b>	<0.002	<0.002	<0.002	<b>0.034</b>	<0.002	<0.002	--
B5-7.0	7	5/15/90	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<b>0.027</b>	<0.002	<0.002	--
B6-7.0	7	5/15/90	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
B-7@6ft	6	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-7@13ft	13	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-8@4ft	4	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-8@10.5ft	10	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-9@13ft	13	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-9@26ft	26	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-10@4ft	4	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B-10@11.3ft	11.3	6/12/91	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
B11@6.2ft	6.2	7/25/11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
B12@11ft	11	7/25/11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--
DW-5	5	4/28/92	<b>0.007</b>	<0.005	<b>0.073</b>	<0.005	<0.005	<0.005	<b>0.180</b>	<0.005	<0.005	--
DW-10	10	4/28/92	<b>0.034</b>	<b>0.006</b>	<b>0.430</b>	<0.005	<0.005	<b>0.005</b>	<b>0.620</b>	<0.005	<0.005	--
DW-15	15	4/28/92	<b>0.029</b>	<b>0.008</b>	<b>0.270</b>	<0.005	<0.005	<0.005	<b>0.460</b>	<0.005	<0.005	--
DW-20	20	4/28/92	<b>0.005</b>	<0.005	<b>0.045</b>	<0.005	<0.005	<0.005	<b>0.077</b>	<0.005	<0.005	--
DW-25	25	4/28/92	<0.005	<0.005	<b>0.029</b>	<0.005	<0.005	<0.005	<b>0.068</b>	<0.005	<0.005	--
DW-30	30	4/28/92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
DW-35	35	4/28/92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.010</b>	<0.005	<0.005	--
DW-40	40	4/28/92	<0.005	<0.005	<b>0.030</b>	<0.005	<0.005	<0.005	<b>0.031</b>	<0.005	<0.005	--
DW-45	45	4/28/92	<0.005	<0.005	<b>0.024</b>	<0.005	<0.005	<0.005	<b>0.026</b>	<0.005	<0.005	--

**Table 2**  
**Summary of Soil Sample Analytical Results**  
**Selected Chlorinated VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Sample ID	Sample Depth (feet)	Date Collected	1,1-dichloroethane (DCA)	1,2-dichloroethane (DCA)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Carbon Range Varies)
<b>Residential RSLs</b>			<b>3.6</b>	<b>0.46</b>	<b>230</b>	<b>160</b>	<b>1600</b>	<b>24</b>	<b>8100</b>	<b>0.94</b>	<b>0.059</b>	<b>100*</b>
<b>Industrial RSLs</b>			<b>16</b>	<b>2.0</b>	<b>1000</b>	<b>2300</b>	<b>23000</b>	<b>100</b>	<b>36000</b>	<b>6</b>	<b>1.7</b>	<b>1000*</b>
DW-52	52	4/28/92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
DW-60	60	4/28/92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
DW-80	80	4/29/92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
DW-120	120	4/29/92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--
HA-1@2ft	2	9/17/14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.030	<60 <sup>(2)</sup>
HA-1@4ft	4	9/17/14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.030	<60 <sup>(2)</sup>
VE-1@13.5'	13.5	7/30/93	<b>0.0065</b>	<0.003	<0.003	--	<0.003	<0.003	<b>0.0065</b>	<0.003	<0.005	<b>14</b> <sup>(3)</sup>
VE-1@18.5'	18.5	7/30/93	<0.003	<0.003	<0.003	--	<0.003	<0.003	<0.003	<0.003	<0.005	<10 <sup>(3)</sup>

**Notes:**

All results in milligrams per kilogram (mg/kg)

<0.002 = not indicated at or above the reporting limit shown

ND = Not indicated at or above the reporting limit. Data obtained from report table because historical report did not contain the laboratory analytical report(s).

Result is greater than or equal to the Residential RSL / EHS IL.

Result is greater than or equal to the Industrial RSL / EHS IL.

VOCs = volatile organic compounds

TPH = total petroleum hydrocarbons

-- = no data available / not chemically analyzed

\* = Santa Barbara County Environmental Health Services Investigation Level (EHS IL) for TPH at residential and industrial properties.

(1) = Analyzed for total recoverable petroleum hydrocarbons (TRPH) by US EPA Method 418.1; no carbon range specified

(2) = Analyzed for TPH in the diesel and motor oil carbon ranges by US EPA Method 8015M

(3) = Analyzed for TPH in the gasoline carbon range by US EPA Method 8015M

RSLs = US EPA Regional Screening Levels for Chemical Contaminants at Superfund Sites (TR=1E-06, THQ=1.0), May 2018

US EPA = United States Environmental Protection Agency

**Table 3**  
**Summary of First Semi-Annual 2019 Groundwater Monitoring Data**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Gauged	Date Sampled	TOC (ft. AMSL)	DTW (ft.)	GWE (ft. AMSL)	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
B-3	3/4/19	--	234.39	DRY	--	--	--	--	--	--	--	--	--	--	--	--
B-4	3/4/19	--	234.32	DRY	--	--	--	--	--	--	--	--	--	--	--	--
B-5	3/4/19	3/5/19	235.12	12.72	222.40	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	220
B-6	3/4/19	3/5/19	234.99	12.00	222.99	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	570
B-7	3/4/19	--	232.66	DRY	--	--	--	--	--	--	--	--	--	--	--	--
B-8	3/4/19	3/5/19	233.91	7.32	226.59	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.3	<0.5	<0.5	110
B-9	3/4/19	--	233.07	DRY	--	--	--	--	--	--	--	--	--	--	--	--
B-10	3/4/19	3/4/19	231.65	12.41	219.24	2.8	6.2	3.2	540	<0.5	<0.5	0.25	0.79	1.7	<0.5	<148
B-11	3/4/19	3/4/19	234.80	11.11	223.69	18	1.1	<0.5	8.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<151
B-12	3/4/19	3/4/19	232.46	9.06	223.40	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<151
DW-1	3/4/19	3/5/19	--	194.45	40.25*	<1.0	<0.5	<0.5	<0.5	9	<0.5	<0.5	<0.5	45	<0.5	72
VE-1	3/4/19	3/4/19	234.70	10.81	223.89	<1.1	<0.5	<0.5	4.2	<0.5	<0.5	<0.5	2.2	<0.5	<0.5	640
State MCLs						1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>

**Notes:**

TOC = top of casing elevation

AMSL = above mean sea level

(ft.) = feet

DTW = depth to water

GWE = groundwater elevation

All results in micrograms per liter (ug/L)

<0.50 = not indicated at or above the reporting limit

VOCs = volatile organic compounds

TPH = total petroleum hydrocarbons

State MCL = State of California Maximum Contaminant Level for Drinking Water

(a) State Notification Level

(b) typical screening level for TPH in groundwater at industrial sites

Result is greater than or equal to State MCL (VOCs) or typical industrial screening level (TPH)

-- = data not available

\* = approximate groundwater elevation due to unknown TOC elevation (used 234.70 as TOC based on adjacent well VE-1)

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-3	12/20/89	--	770	140	3000	--	--	48	12000	4.3	1.8	<3
B-3	5/21/90	--	660	170	3700	--	--	110	19000	7	<2	--
B-3	1/16/91	--	570	160	3900	--	--	80	13000	<50	<50	--
B-3	6/17/91	--	59	9.4	210	<0.5	<0.5	28	970	<0.5	<0.5	--
B-3	3/15/94	--	48	<0.5	110	--	<0.5	6.3	300	<0.5	<0.5	<100
B-3	5/18/94	--	110	13	420	--	<0.5	7.6	500	<0.5	<0.5	--
B-3	9/30/94	--	270	41	1500	--	<10	33	1400	<10	<10	--
B-3	3/20/95	--	230	37	1400	<5	<5	32	960	<5	<5	4500
B-3	9/15/95	--	240	47	2000	<20	<20	31	1200	<20	<20	1000
B-3	3/18/96	--	62	13	360	<1	<1	6	180	<1	<3	2600
B-3	9/18/96	--	2.7	2.4	15	<0.5	<0.5	<0.5	6.1	<0.5	<0.5	<100
B-3	3/25/97	--	2.7	1.7	18	<0.5	<0.5	0.64	4.4	<0.5	<0.5	<100
B-3	9/19/97	--	<0.5	<0.5	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-3	3/19/98	--	3.9	<0.5	5.7	<0.5	<0.5	<0.5	5.2	<0.5	<0.5	<100
B-3	9/28/98	--	22	3.6	250	<0.5	<0.5	3.3	40	<0.5	<0.5	1000
B-3	3/31/99	--	0.6	0.7	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	440
B-3	9/28/99	--	49	7.8	410	<0.5	<0.5	8.2	75	<0.5	<0.5	250
B-3	3/27/00	--	0.5	0.6	3.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	870
B-3	10/17/00	--	33	9	81	<0.5	<0.5	3.2	22	<0.5	<0.5	--
B-3	3/21/01	--	170	19	1200	0.8	<0.5	22	170	1	0.8	470
B-3	10/6/01	--	18	4	90	<0.5	<0.5	2.4	12	<0.5	<0.5	160
B-3	3/15/02	--	61	14	370	<0.5	<0.5	9.3	32	0.6	<0.5	<100
B-3	9/27/02	--	52	12	310	<5	<5	6.4	29	<5	<5	<100
B-3	3/14/03	--	26	8.4	140	<0.5	<0.5	3.6	15	<0.5	<0.5	<100
B-3	9/19/03	--	28	8.8	290	<0.5	<0.5	6.3	18	<0.5	<0.5	<100
B-3	3/27/04	--	30	3.5	770	<0.5	<0.5	5.2	170	<0.5	<0.5	120
B-3	9/24/04	--	34	5.4	410	<0.5	<0.5	3.3	140	<0.5	<0.5	--
B-3	3/11/05	--	19	<0.5	130	<0.5	<0.5	2.3	12	<0.5	1	--
B-3	9/10/05	--	18	5.4	81	<0.5	<0.5	1.9	<0.5	<0.5	<0.5	--
B-3	3/10/06	--	8.7	3.4	32	<0.5	<0.5	<0.5	7.1	<0.5	<0.5	--
B-3	9/15/06	--	56	<0.5	470	<0.5	<0.5	6.9	130	<0.5	<0.5	--
B-5	5/21/90	--	58	<2	70	--	--	<0.5	1000	<5	<2	--
B-5	1/16/91	--	52	<2	80	--	--	<0.5	1200	<2	<2	--
B-5	6/17/91	--	56	<0.5	81	<0.5	<0.5	1.8	5300	0.6	<0.5	--
B-5	3/15/94	--	22	<0.5	75	--	<0.5	<0.5	480	<0.5	<0.5	<100
B-5	5/18/94	--	17	<2	55	--	<2	<0.5	420	<2	<2	--
B-5	9/30/94	--	34	<10	<0.5	--	<10	<0.5	510	<10	<10	--
B-5	3/20/95	--	22	<5	53	<5	<5	<0.5	320	<5	<5	630
B-5	9/15/95	--	17	<5	52	<5	<5	<5	240	<5	<5	170



**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-5	3/18/96	--	1.3	<0.5	3.2	<0.5	<0.5	<0.5	89	<0.5	0.75	2300
B-5	9/18/96	--	15	<0.5	40	<0.5	<0.5	<0.5	96	<0.5	<0.5	<100
B-5	3/25/97	--	20	<0.5	56	<0.5	<0.5	<0.5	102	<0.5	<0.5	<100
B-5	9/19/97	--	19	<0.5	62	<0.5	<0.5	<0.5	90	<0.5	<0.5	<100
B-5	3/19/98	--	18	<0.5	47	<0.5	<0.5	<0.5	47	<0.5	<0.5	<100
B-5	9/28/98	--	13	<0.5	25	<0.5	<0.5	<0.5	26	<0.5	<0.5	470
B-5	3/31/99	--	12	<0.5	22	<0.5	<0.5	<0.5	23	<0.5	<0.5	190
B-5	9/28/99	--	10	<0.5	17	<0.5	<0.5	<0.5	17	<0.5	<0.5	130
B-5	3/27/00	--	13	<0.5	21	<0.5	<0.5	<0.5	21	<0.5	<0.5	340
B-5	10/17/00	--	14	<0.5	32	<0.5	<0.5	1.9	32	<0.5	<0.5	<100
B-5	3/21/01	--	4.8	<0.5	6.8	<0.5	<0.5	<0.5	4.1	<0.5	<0.5	250
B-5	10/6/01	--	3.9	<0.5	6.1	<0.5	<0.5	<0.5	3.1	<0.5	<0.5	200
B-5	3/15/02	--	3.4	<0.5	7	<0.5	<0.5	<0.5	2.7	<0.5	<0.5	250
B-5	9/27/02	--	4.2	<0.5	6.7	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<100
B-5	3/14/03	--	3.7	<0.5	5.8	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	180
B-5	9/19/03	--	3.5	<0.5	9.7	<0.5	<0.5	0.6	2.1	<0.5	<0.5	<100
B-5	12/19/03	2.0	3.1	<0.5	11	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	78
B-5	3/27/04	--	2.8	<0.5	2	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	440
B-5	9/24/04	--	2.6	<0.5	3.9	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<100
B-5	3/11/05	--	2.1	<0.5	3.9	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<100
B-5	9/10/05	--	5.6	<0.5	7.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	270
B-5	3/10/06	--	5.7	<0.5	6.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	410
B-5	9/15/06	--	2.9	<0.5	7.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
B-5	3/23/07	--	1.4	<0.5	3.4	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	130
B-5	8/31/07	--	1.1	<0.5	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	3/7/08	--	4.8	<0.5	6.7	<0.5	<0.5	<0.5	3.1	<0.5	<0.5	130
B-5	9/19/08	--	3.3	<0.5	3.8	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5
B-5	3/13/09	--	2.7	<0.5	3.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	52
B-5	9/18/09	--	0.91	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	3/11/10	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	330
B-5	9/17/10	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	250
B-5	3/18/11	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	320
B-5	9/16/11	--	0.71	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	250
B-5	3/16/12	--	0.71	<0.5	0.77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	200
B-5	9/12/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	130
B-5	3/11/13	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	260
B-5	9/12/13	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	3/10/14	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	9/17/14	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-5	3/18/15	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	9/10/15	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	3/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	9/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	3/15/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	9/12/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	3/28/18	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	10/4/18	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	212
B-5	3/5/19	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	220
B-6	5/21/90	--	84	<2	83	--	--	5	180	<5	<2	--
B-6	1/16/91	--	65	<0.5	14	--	--	4	130	<0.5	<0.5	--
B-6	6/17/91	--	68	<0.5	23	<0.5	<0.5	5	510	<0.5	<0.5	--
B-6	3/15/94	--	15	<0.5	15	--	<0.5	2	27	<0.5	<0.5	<100
B-6	5/18/94	--	15	<1	24	--	<1	2.3	30	<1	<1	--
B-6	9/30/94	--	4.5	<0.5	4.3	--	<0.5	2.4	14	<0.5	<0.5	--
B-6	3/20/95	--	6.3	<0.5	3.5	<0.5	<0.5	1.9	13	<0.5	<0.5	560
B-6	9/15/18	--	7.8	<0.5	6.6	0.6	<0.5	2.5	15	<0.5	<0.5	400
B-6	3/18/96	--	4.8	<0.5	3.2	<0.5	<0.5	1.7	14	<0.5	0.75	1000
B-6	9/18/96	--	9.4	<0.5	17	<0.5	<0.5	1.8	10	<0.5	<0.5	<100
B-6	3/27/97	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-6	9/19/97	--	18	<0.5	37	<0.5	<0.5	3.6	14	<0.5	<0.5	<100
B-6	3/19/98	--	5.2	<0.5	2.7	<0.5	<0.5	<0.5	5.5	<0.5	<0.5	<100
B-6	9/28/98	--	14	<0.5	23	<0.5	<0.5	2.2	9.7	<0.5	<0.5	400
B-6	3/31/99	--	7.4	<0.5	14	<0.5	<0.5	1.5	5.5	<0.5	<0.5	300
B-6	9/28/99	--	13	<0.5	28	<0.5	<0.5	2.7	9.6	<0.5	<0.5	130
B-6	3/27/00	--	3.2	<0.5	1.2	<0.5	<0.5	1.1	7.3	<0.5	<0.5	670
B-6	10/17/00	--	12	<0.5	18	<0.5	<0.5	2.4	5.9	<0.5	<0.5	<100
B-6	3/21/01	--	5.9	<0.5	9	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<100
B-6	10/6/01	--	60	<0.5	560	2.3	<0.5	7.1	240	1.2	<0.5	<100
B-6	3/15/02	--	6.9	<0.5	19	<0.5	<0.5	0.7	5.3	<0.5	<0.5	210
B-6	9/27/02	--	29	<0.5	170	1.5	<0.5	3	73	<0.5	<0.5	<100
B-6	3/14/03	--	6.9	<0.5	22	<0.5	<0.5	0.7	3.4	<0.5	<0.5	160
B-6	9/19/03	--	28	4.4	210	1.6	<0.5	4.3	68	0.7	<0.5	<100
B-6	12/19/03	130	37	<0.5	260	1.7	<0.5	4.4	72	0.8	<0.5	--
B-6	3/27/04	--	90	<0.5	830	9	<0.5	5	380	2.2	<0.5	240
B-6	9/24/04	--	88	<0.5	490	14	<0.5	5	270	2.5	<0.5	<100
B-6	3/11/05	--	37	<0.5	130	5.5	<0.5	1.9	85	0.1	<0.5	<100
B-6	9/10/05	--	110	<0.5	470	16	<0.5	4.7	270	0.1	<0.5	<100
B-6	3/10/06	--	110	<0.5	540	18	<0.5	<0.5	440	<0.5	<0.5	160

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-6	9/15/06	--	73	<0.5	310	8.2	<0.5	4.4	140	1.3	<0.5	<0.5
B-6	3/23/07	--	3.6	<0.5	20	<0.5	<0.5	<0.5	6.1	<0.5	<0.5	100
B-6	8/31/07	--	8.2	<0.5	30	<0.5	<0.5	<0.5	4.7	<0.5	<0.5	<0.5
B-6	3/7/08	--	64	<0.5	310	10	<0.5	3.2	130	1.9	<0.5	180
B-6	9/19/08	--	74	<0.5	330	10	<0.5	4.4	200	1.9	<0.5	<0.5
B-6	3/13/09	--	1.6	<0.5	6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	9/18/09	--	4.8	<0.5	18	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5
B-6	3/11/10	--	1	<0.5	4.4	<0.5	<0.5	<0.5	0.68	<0.5	<0.5	210
B-6	9/17/10	--	3.9	<0.5	12	<0.5	<0.5	0.5	2.1	<0.5	<0.5	190
B-6	3/18/11	--	1.6	<0.5	4.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	230
B-6	9/16/11	--	3.6	<0.5	8.2	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	110
B-6	3/16/12	--	4.1	<0.5	10	<0.5	<0.5	<0.5	1	<0.5	<0.5	110
B-6	9/12/12	--	<0.5	<0.5	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	3/11/13	--	3.9	<0.5	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	9/12/13	--	2.33	<0.5	9.41	<0.5	<0.5	<0.5	1.21	<0.5	<0.5	<0.5
B-6	3/10/14	--	2.57	<0.5	8.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	9/17/14	--	4.23	<0.5	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	3/18/15	--	<0.5	<0.5	2.12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	9/10/15	--	2.17	<0.5	86.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	3/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	9/21/16	--	<0.5	<0.5	1.86	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	3/15/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	9/12/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	3/28/18	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	3/5/19	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	570
B-8	6/17/91	--	6.9	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	--
B-8	1/26/94	--	2.3	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	9/30/94	--	3.2	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
B-8	3/20/95	--	13	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<100
B-8	9/15/95	--	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/18/96	--	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	200
B-8	9/18/96	--	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/25/97	--	8.1	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<100
B-8	9/19/97	--	6.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/19/98	--	8.5	<0.5	<0.5	<0.5	<0.5	<0.5	10	<0.5	<0.5	<100
B-8	9/28/98	--	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/31/99	--	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	9/28/99	--	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/27/00	--	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	120

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-8	10/17/00	--	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/21/01	--	3.7	<0.5	0.2	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<100
B-8	10/6/01	--	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/15/02	--	5.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	9/27/02	--	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/14/03	--	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	9/19/03	--	0.6	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	12/19/03	<1.0	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/27/04	--	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	9/24/04	--	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<100
B-8	3/11/05	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	100
B-8	9/10/05	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	50
B-8	3/10/06	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	70
B-8	9/15/06	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/23/07	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5
B-8	8/31/07	--	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/7/08	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2	<0.5	<0.5	100
B-8	9/19/08	--	2.9	<0.5	<0.5	<0.5	<0.5	<0.5	0.96	<0.5	<0.5	<0.5
B-8	3/13/09	--	0.94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/11/10	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	140
B-8	9/17/10	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/18/11	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	120
B-8	9/16/11	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	110
B-8	3/16/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	180
B-8	9/12/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/11/13	--	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	9/12/13	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/10/14	--	1.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	9/17/14	--	2.11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/18/15	--	2.41	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	9/10/15	--	2.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/21/16	--	1.44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	9/21/16	--	1.44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/15/17	--	1.09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-8	3/5/19	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.3	<0.5	<0.5	110
B-10	6/17/91	--	<0.5	<0.5	2.9	<0.5	<0.5	<0.5	4.9	<0.5	<0.5	--
B-10	1/26/94	--	0.5	<0.5	21	--	<0.5	<0.5	13	<0.5	<0.5	<100
B-10	9/30/94	--	1.1	<0.5	3.9	--	<0.5	<0.5	21	<0.5	<0.5	--
B-10	3/20/95	--	1.2	0.6	48	<0.5	<0.5	<0.5	26	<0.5	<0.5	<100

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-10	9/15/95	--	3.9	2	180	<1	<1	<1	92	<1	<1	<100
B-10	3/18/96	--	1.3	<0.5	89	<0.5	<0.5	<0.5	33	<0.5	0.75	200
B-10	9/18/96	--	1.5	0.7	89	<0.5	<0.5	<0.5	35	<0.5	<0.5	<100
B-10	3/26/97	--	2.3	1.1	155	<0.5	<0.5	<0.5	37	<0.5	<0.5	<100
B-10	10/4/97	--	<0.5	<0.5	121	<0.5	<0.5	<0.5	33	<0.5	<0.5	<100
B-10	3/19/98	--	2.6	1.4	170	<0.5	<0.5	<0.5	35	<0.5	<0.5	<100
B-10	9/28/98	--	1.9	1.1	110	<0.5	<0.5	<0.5	21	<0.5	<0.5	<100
B-10	3/1/99	--	2.4	1.4	170	<0.5	<0.5	<0.5	30	0.6	<0.5	<100
B-10	9/28/99	--	2.5	1.7	150	<0.5	<0.5	<0.5	30	<0.5	<0.5	<100
B-10	3/27/00	--	3.9	2.4	180	<0.5	<0.5	<0.5	35	0.9	<0.5	<100
B-10	10/17/00	--	3.2	2.1	200	<0.5	<0.5	<0.5	24	0.7	<0.5	<100
B-10	3/21/01	--	3.9	2.3	240	<0.5	<0.5	<0.5	36	0.8	<0.5	<100
B-10	10/6/01	--	4.5	2.7	240	<0.5	<0.5	<0.5	31	1.2	<0.5	<100
B-10	3/15/02	--	6.1	4.2	310	<0.5	<0.5	<0.5	35	1.6	<0.5	<100
B-10	9/27/02	--	5	3.1	280	<0.5	<0.5	<0.5	28	1.3	<0.5	<100
B-10	3/14/03	--	5.8	3.3	420	<0.5	<0.5	<0.5	33	1.1	<0.5	<100
B-10	9/19/03	--	8	4.4	720	<0.5	<0.5	0.5	36	2.6	<0.5	<100
B-10	12/19/03	3.2	6	4.8	490	<0.5	<0.5	<0.5	27	1.9	<0.5	<100
B-10	3/27/04	--	6.2	4.8	660	<0.5	<0.5	<0.5	34	1.6	<0.5	<100
B-10	9/24/04	--	7.3	3.8	730	<0.5	<0.5	<0.5	39	2.1	<0.5	<100
B-10	3/21/05	--	6.3	<2	440	<2	<2	<2	28	<2	<2	<100
B-10	9/10/05	--	10	6.6	690	<0.5	<0.5	<0.5	49	<0.5	<0.5	<0.5
B-10	9/15/06	--	9.2	<0.5	540	<0.5	<0.5	<0.5	26	2.2	<0.5	<0.5
B-10	3/23/07	--	7.7	6	500	<0.5	<0.5	<0.5	20	2.1	<0.5	<0.5
B-10	8/31/07	--	6.2	<0.5	660	<0.5	<0.5	<0.5	19	5.8	<0.5	<0.5
B-10	3/7/08	--	6.8	4.4	480	<0.5	<0.5	<0.5	22	2	<0.5	<0.5
B-10	9/19/08	--	9.3	<0.5	730	<0.5	<0.5	<0.5	21	2.7	<0.5	<0.5
B-10	3/13/09	--	8.6	<0.5	800	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5
B-10	9/18/09	--	9	5.2	640	<0.5	<0.5	<0.5	15	2.9	<0.5	<0.5
B-10	3/11/10	--	7.4	<0.5	580	<0.5	<0.5	<0.5	14	3	<0.5	<0.5
B-10	9/17/10	--	5.6	6.2	490	<0.5	<0.5	<0.5	9.4	2.6	<0.5	<0.5
B-10	3/18/11	--	8.9	<0.5	740	<0.5	<0.5	<0.5	14	3.2	<0.5	<0.5
B-10	9/16/11	--	9	<0.5	890	<0.5	<0.5	<0.5	12	<0.5	<0.5	<0.5
B-10	3/16/12	--	9.4	6.4	760	<0.5	<0.5	<0.5	9.4	2.7	<0.5	<0.5
B-10	9/12/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7.9	<0.5	<0.5	<0.5
B-10	3/11/13	--	7.2	4.4	670	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	95
B-10	4/14/13	--	<0.5	<0.5	765	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	9/12/13	--	<0.5	<0.5	767	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	3/10/14	--	<0.5	<0.5	492	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-10	9/17/14	--	<0.5	<0.5	579	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	3/18/15	--	7.4	<0.5	408	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	9/10/15	--	<0.5	<0.5	677	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	3/21/16	--	<0.5	<0.5	726	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	9/21/16	--	<0.5	<0.5	467	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	3/15/17	--	<0.5	<0.5	613	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	9/12/17	--	<0.5	<0.5	603	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	3/28/18	--	<0.5	<0.5	546	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	10/4/18	--	5	2.8	600	<0.5	<0.5	<0.5	0.82	1.7	<0.5	<224
B-10	3/4/19	2.8	6.2	3.2	540	<0.5	<0.5	0.25	0.79	1.7	<0.5	<148
B-11	9/16/11	--	0.71	<0.5	4.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/16/12	--	0.83	<0.5	5.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	9/12/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/11/13	--	0.62	<0.5	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	9/12/13	--	<0.5	<0.5	5.38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/10/14	--	<0.5	<0.5	3.15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	9/17/14	--	<0.5	<0.5	4.78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/18/15	--	<0.5	<0.5	3.14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	9/10/15	--	<0.5	<0.5	4.02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/21/16	--	<0.5	<0.5	3.85	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	9/21/16	--	<0.5	<0.5	4.95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/15/17	--	<0.5	<0.5	5.45	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	9/12/17	--	<0.5	<0.5	12.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	3/28/18	--	<0.5	<0.5	6.95	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-11	10/4/18	--	1.2	<0.5	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<178
B-11	3/4/19	18	1.1	<0.5	8.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<151
B-12	9/16/11	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	3/16/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	9/12/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	3/11/13	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	9/12/13	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	3/10/14	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	9/17/14	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	3/18/15	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	9/10/15	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	3/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	9/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	3/15/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	9/12/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
State MCLs		1 <sup>(a)</sup>	5	0.5	6	6	10	5	200	5	0.5	1000 <sup>(b)</sup>
B-12	3/28/18	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
B-12	10/4/18	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<152
B-12	3/4/19	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<151
DW-1	5/5/92	--	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	8.6	7.5	<0.5	--
DW-1	3/15/17	--	<1	<1	<1	10.9	<1	<1	<1	60.1	<3	250
DW-1	3/5/19	<1.0	<0.5	<0.5	<0.5	9	<0.5	<0.5	<0.5	45	<0.5	72
VE-1	1/26/94	--	100	<0.5	17	--	<0.5	0.6	130	<0.5	0.5	<0.5
VE-1	9/30/94	--	310	<10	150	--	<10	<10	320	<10	<10	--
VE-1	12/27/94	--	130	<5	74	--	<5	<5	140	<5	<5	1300
VE-1	3/20/95	--	110	<5	34	<5	<5	<5	180	<5	<5	470
VE-1	9/15/95	--	110	<5	87	6.4	<5	<5	130	<5	<5	270
VE-1	3/18/96	--	50	<0.5	19	3	<0.5	<0.5	28	<0.5	0.75	900
VE-1	9/18/96	--	104	<0.5	120	6.4	<0.5	1.5	100	0.5	<0.5	<100
VE-1	3/27/97	--	101	<0.5	110	<0.5	<0.5	1.8	95	<0.5	<0.5	<100
VE-1	10/3/97	--	<0.5	<0.5	8.1	<0.5	<0.5	<0.5	6.9	<0.5	<0.5	<100
VE-1	3/19/98	--	9.6	<0.5	28	<0.5	<0.5	<0.5	25	<0.5	<0.5	<100
VE-1	9/28/98	--	2	<0.5	80	0.7	<0.5	0.6	69	<0.5	<0.5	1700
VE-1	3/31/99	--	15	<0.5	84	<0.5	<0.5	0.6	64	<0.5	<0.5	700
VE-1	9/28/99	--	23	0.6	160	0.6	<0.5	1.3	120	<0.5	<0.5	230
VE-1	3/27/00	--	16	<0.5	89	<0.5	<0.5	0.8	66	<0.5	<0.5	300
VE-1	10/17/00	--	7.6	<0.5	53	<0.5	<0.5	1.5	38	<0.5	<0.5	110
VE-1	3/21/01	--	11	0.5	80	<0.5	<0.5	0.5	54	<0.5	<0.5	150
VE-1	10/6/01	--	8.5	0.6	70	<0.5	<0.5	0.7	25	<0.5	<0.5	200
VE-1	3/15/02	--	7.8	<0.5	60	<0.5	<0.5	<0.5	34	<0.5	<0.5	170
VE-1	9/27/02	--	7.3	<5	69	<5	<5	<5	41	<5	<5	<100
VE-1	3/14/03	--	6.7	<0.5	90	<0.5	<0.5	<0.5	57	<0.5	<0.5	180
VE-1	9/19/03	--	2.3	<0.5	23	<0.5	<0.5	0.9	9.9	<0.5	<0.5	<100
VE-1	12/19/03	17	2.9	<0.5	41	<0.5	<0.5	<0.5	25	<0.5	<0.5	120
VE-1	3/27/04	--	2.5	<0.5	35	<0.5	<0.5	<0.5	16	<0.5	<0.5	360
VE-1	9/24/04	--	3.9	<0.5	66	<0.5	<0.5	<0.5	27	<0.5	<0.5	<100
VE-1	3/11/05	--	1.7	<0.5	33	<0.5	<0.5	<0.5	21	<0.5	<0.5	220
VE-1	9/10/05	--	3.8	<0.5	67	<0.5	<0.5	<0.5	42	<0.5	<0.5	250
VE-1	3/10/06	--	<0.5	<0.5	19	<0.5	<0.5	<0.5	12	<0.5	<0.5	120
VE-1	9/15/06	--	4.2	<0.5	120	<0.5	<0.5	<0.5	46	<0.5	<0.5	<0.5
VE-1	3/23/07	--	2.8	<0.5	73	<0.5	<0.5	<0.5	37	<0.5	<0.5	450
VE-1	8/31/07	--	0.93	<0.5	14	<0.5	<0.5	<0.5	10	<0.5	<0.5	160
VE-1	3/7/08	--	1.8	<0.5	38	<0.5	<0.5	<0.5	23	<0.5	<0.5	250
VE-1	9/19/08	--	3.7	<0.5	76	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5
VE-1	3/13/09	--	1.9	<0.5	39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5



**Table 4**  
**Summary of Groundwater Sample Analytical Results**  
**Selected VOCs and TPH**  
**3037 Industrial Parkway, Santa Maria, California**

Well ID	Date Collected	1,4-dioxane	1,1-dichloroethane (DCA)	1,2-dichloroethane (EDC)	1,1-dichloroethene (DCE)	cis-1,2-dichloroethene	trans-1,2-dichloroethene	tetrachloroethene (PCE)	1,1,1-trichloroethane (TCA)	trichloroethene (TCE)	vinyl chloride	TPH (Diesel and Motor Oil)
<b>State MCLs</b>		<b>1<sup>(a)</sup></b>	<b>5</b>	<b>0.5</b>	<b>6</b>	<b>6</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>5</b>	<b>0.5</b>	<b>1000<sup>(b)</sup></b>
VE-1	9/18/09	--	0.73	<0.5	9.3	<0.5	<0.5	<0.5	3.3	<0.5	<0.5	<0.5
VE-1	3/11/10	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	140
VE-1	9/17/10	--	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	200
VE-1	3/18/11	--	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	330
VE-1	9/16/11	--	<0.5	<0.5	0.82	<0.5	<0.5	<0.5	3	<0.5	<0.5	350
VE-1	3/16/12	--	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	4.3	<0.5	<0.5	280
VE-1	9/12/12	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	260
VE-1	3/11/13	--	0.57	<0.5	11	<0.5	<0.5	<0.5	7.5	<0.5	<0.5	396
VE-1	4/14/13	--	<0.5	<0.5	9.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	9/12/13	--	<0.5	<0.5	11.9	<0.5	<0.5	<0.5	8.66	<0.5	<0.5	<0.5
VE-1	3/10/14	--	<0.5	<0.5	17.1	<0.5	<0.5	<0.5	8.45	<0.5	<0.5	<0.5
VE-1	9/17/14	--	<0.5	<0.5	8.3	<0.5	<0.5	<0.5	5.98	<0.5	<0.5	<0.5
VE-1	3/18/15	--	<0.5	<0.5	13	<0.5	<0.5	<0.5	6.84	<0.5	<0.5	<0.5
VE-1	9/10/15	--	<0.5	<0.5	89.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	3/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	9/21/16	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	3/15/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	9/12/17	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	3/28/18	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
VE-1	10/4/18	--	<0.5	<0.5	3.2	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	180
VE-1	3/4/19	<1.1	<0.5	<0.5	4.2	<0.5	<0.5	<0.5	2.2	<0.5	<0.5	640

**Notes:**

All results in micrograms per liter (ug/L)

<0.50 = not indicated at or above the reporting limit

-- = not analyzed

VOCs = volatile organic compounds

TPH = total petroleum hydrocarbons

State MCL = State of California Maximum Contaminant Level for Drinking Water

(a) State Notification Level

(b) typical screening level for TPH in groundwater at industrial sites

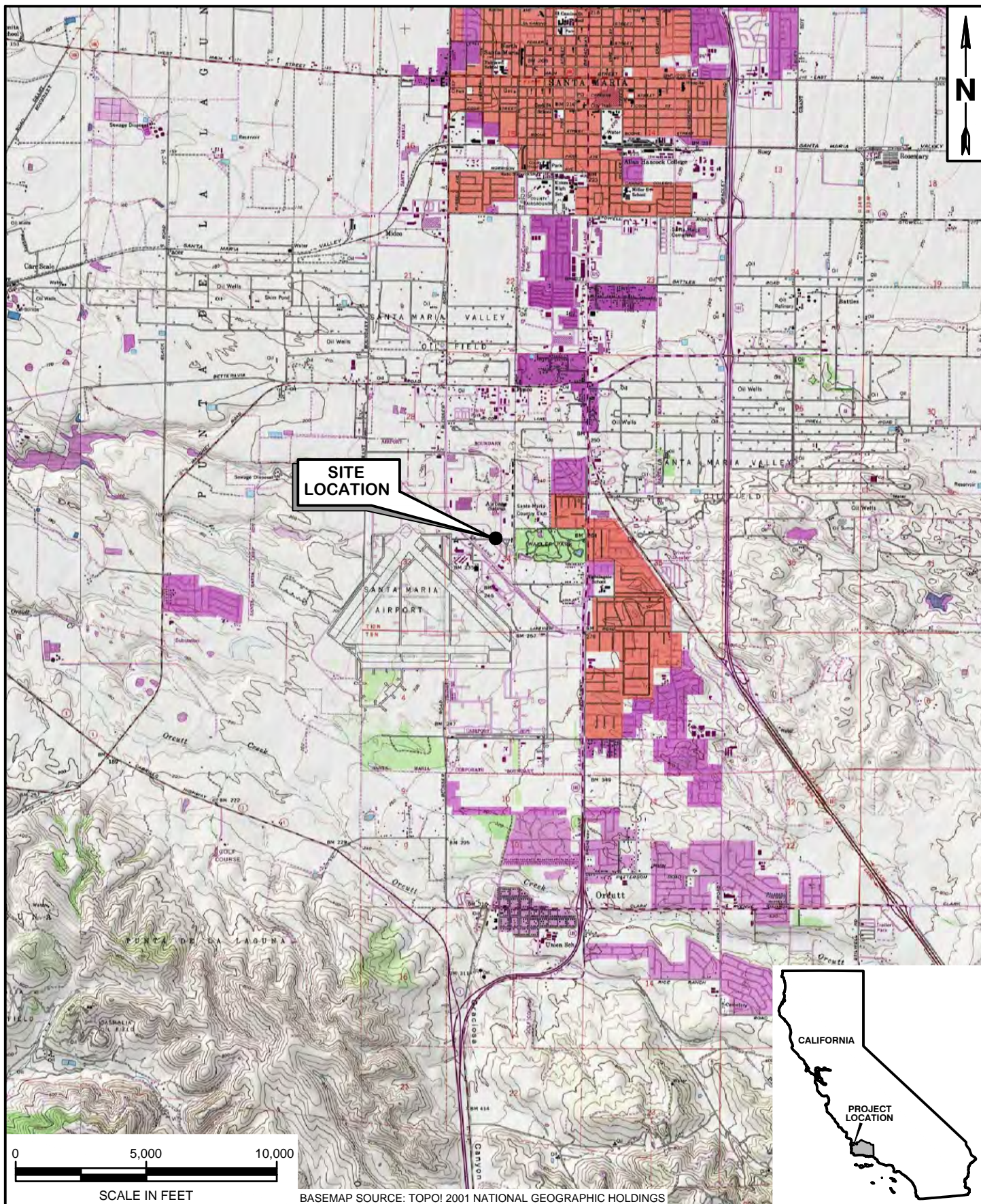
Result is greater than or equal to State MCL (VOCs) or typical industrial screening level (TPH)



## PLATES

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associates, inc.  
ENGINEERS, GEOLOGISTS &  
ENVIRONMENTAL SCIENTISTS

PROJECT NAME: EFT Enterprises, L.P.  
3037 Industrial Park Way  
City of Santa Maria,  
Santa Barbara County, CA

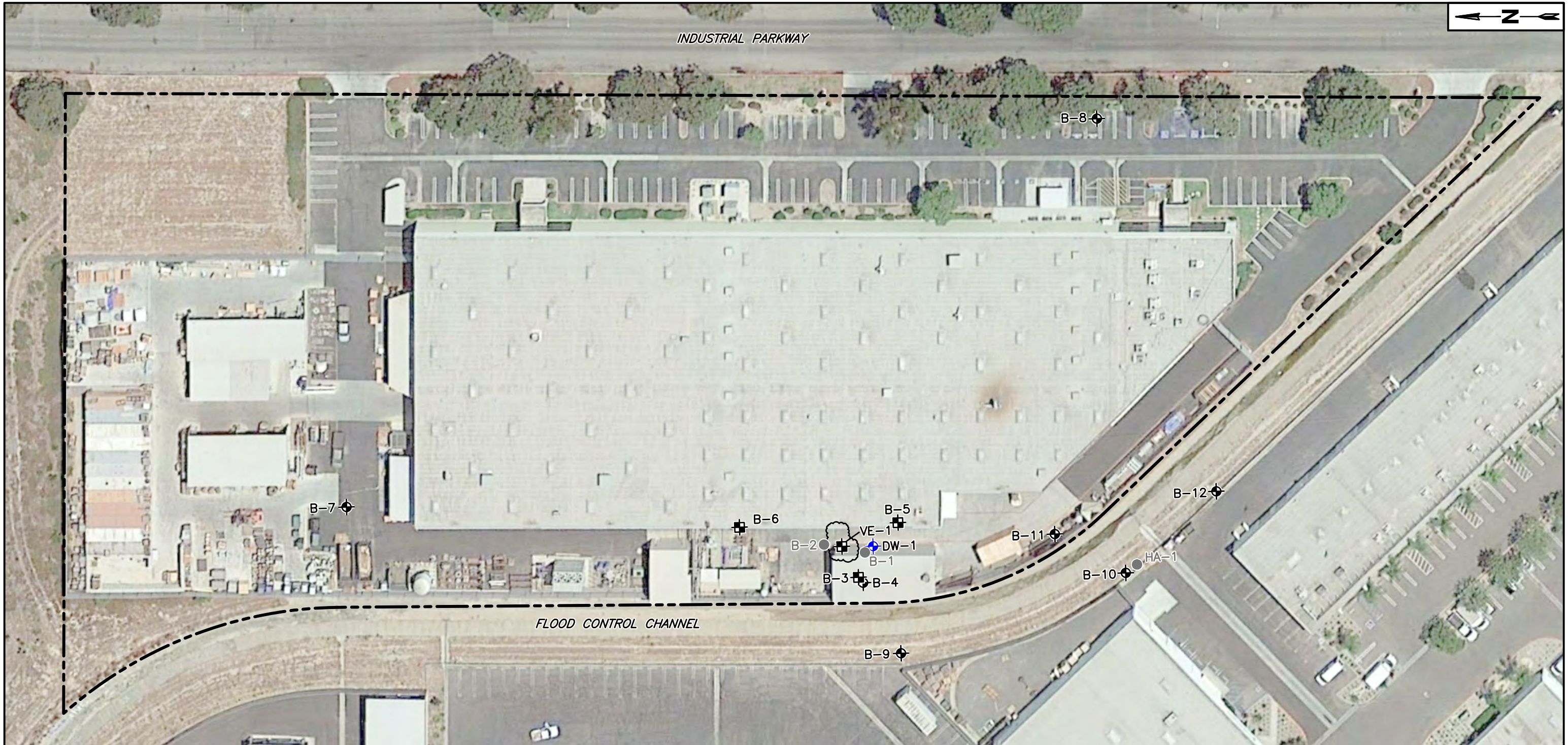
PROJECT NUMBER: 1801-3361 DATE: March 2019

## SITE LOCATION MAP

PLATE  
1



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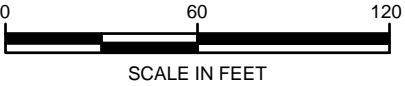


## LEGEND

- PROPERTY BOUNDARY LINE
- B-10 MONITORING WELL LOCATION (PERCHED ZONE)
- B-5 EXTRACTION WELL LOCATION (PERCHED ZONE)
- DW-1 MONITORING WELL LOCATION (REGIONAL AQUIFER)
- HA-1 SOIL BORING LOCATION
- HISTORICAL EXCAVATION LOCATION

## NOTES:

1. BASEMAP SOURCE: GOOGLE EARTH PRO; IMAGE DATE 8/11/2018
2. ALL WELL LOCATIONS SURVEYED BY CANNON INC.; SOIL BORING LOCATIONS ARE APPROXIMATE



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PROJECT NAME: EFT Enterprises, L.P.  
3037 Industrial Park Way  
City of Santa Maria,  
Santa Barbara County, CA  
PROJECT NUMBER: 1801-3361  
DATE: March 2019

SITE PLAN

PLATE  
2



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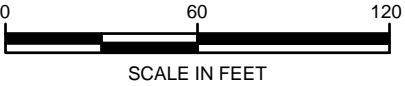


**LEGEND**

- PROPERTY BOUNDARY LINE
- B-10 MONITORING WELL LOCATION (PERCHED ZONE)
- B-5 EXTRACTION WELL LOCATION (PERCHED ZONE)
- DW-1 MONITORING WELL LOCATION (REGIONAL AQUIFER)
- HA-1 SOIL BORING LOCATION
- HISTORICAL EXCAVATION LOCATION
- (222.99) GROUNDWATER ELEVATION IN FEET AMSL
- 226 GROUNDWATER ELEVATION CONTOUR IN FEET AMSL

**NOTES:**

1. BASEMAP SOURCE: GOOGLE EARTH PRO; IMAGE DATE 8/11/2018
2. ALL WELL LOCATIONS SURVEYED BY CANNON INC.; SOIL BORING LOCATIONS ARE APPROXIMATE
3. AMSL = ABOVE MEAN SEA LEVEL
4. \* GROUNDWATER ELEVATION NOT USED IN GROUNDWATER CONTOURS
5. GROUNDWATER GAUGING WAS PERFORMED ON MARCH 4, 2019.



 ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS	PROJECT NAME: EFT Enterprises, L.P. 3037 Industrial Park Way City of Santa Maria, Santa Barbara County, CA	<b>PERCHED GROUNDWATER POTENTIOMETRIC SURFACE MARCH 4, 2019</b>	PLATE <b>3</b>
	PROJECT NUMBER: 1801-3361 DATE: March 2019		



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## LEGEND

- PROPERTY BOUNDARY LINE
- B-10 MONITORING WELL LOCATION (PERCHED ZONE)
- B-5 EXTRACTION WELL LOCATION (PERCHED ZONE)
- DW-1 MONITORING WELL LOCATION (REGIONAL AQUIFER)
- HA-1 SOIL BORING LOCATION
- HISTORICAL EXCAVATION LOCATION
- LIMITS OF MCL/NL EXCEEDANCE IN PERCHED GROUNDWATER

## GROUNDWATER SAMPLE ANALYTICAL RESULTS

PCE	=	TETRACHLOROETHYLENE
TCE	=	TRICHLOROETHANE
1,1-DCA	=	1,1 DICHLOROETHANE
1,1-DCE	=	1,1 DICHLOROETHENE
1,2-EDC	=	1,2 DICHLOROETHANE
1,1,1-TCA	=	1,1,1 TRICHLOROETHENE
1,4-D	=	1,4 DIOXANE
3.2	=	DENOTES CONCENTRATION WHICH EXCEEDS CALIFORNIA DRINKING WATER MAXIMUM CONTAMINANT LEVELS (MCL) OR NOTIFICATION LEVEL (NL)

## NOTES:

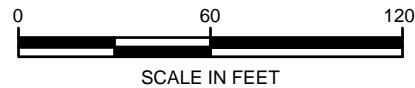
1. BASEMAP SOURCE: GOOGLE EARTH PRO; IMAGE DATE 8/11/2018
2. ALL WELL LOCATIONS SURVEYED BY CANNON INC.; SOIL BORING LOCATIONS ARE APPROXIMATE
3. ug/L= MICROGRAMS PER LITER
4. GROUNDWATER SAMPLING WAS PERFORMED ON MARCH 4 AND MARCH 5, 2019.

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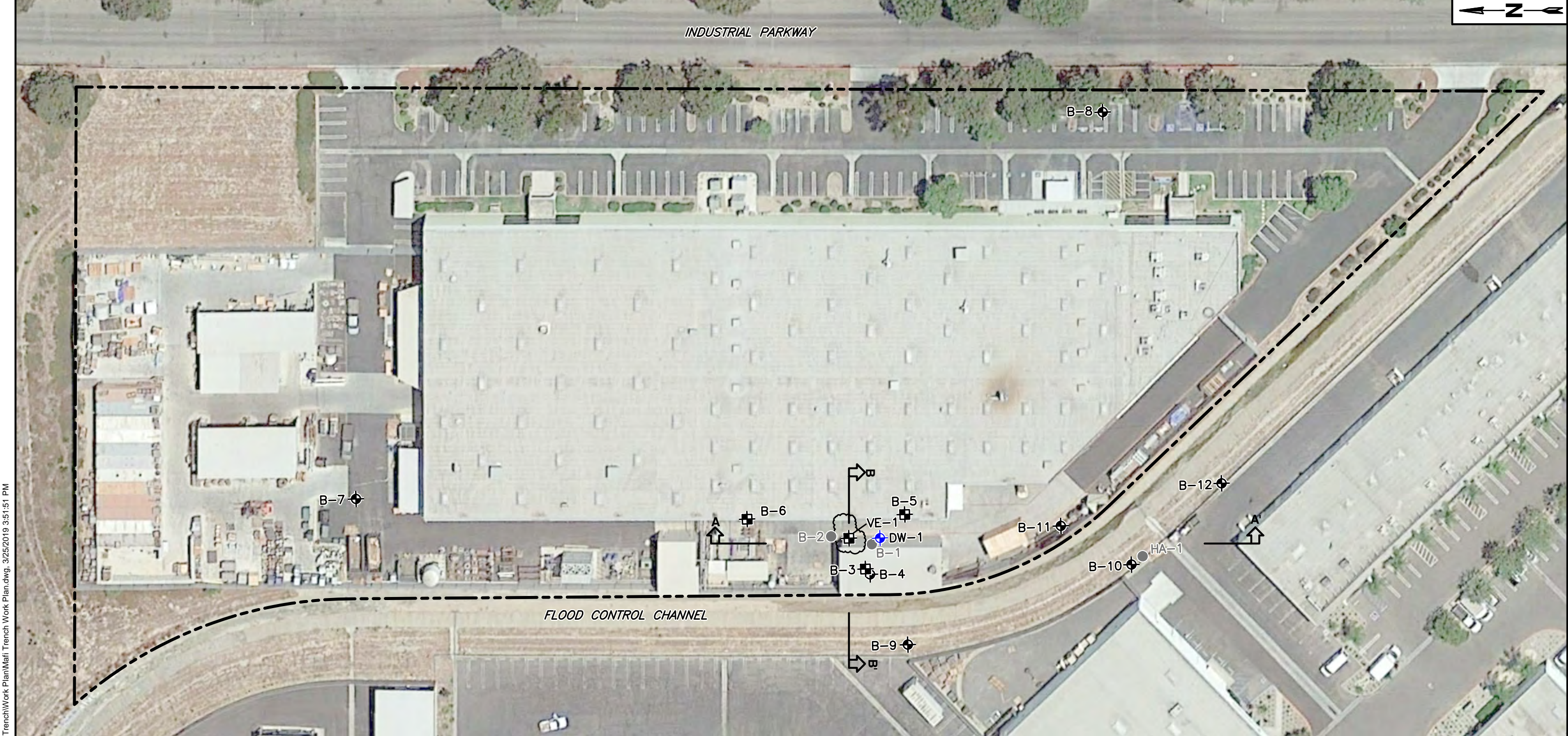
PROJECT NAME: EFT Enterprises, L.P.  
3037 Industrial Park Way  
City of Santa Maria,  
Santa Barbara County, CA  
PROJECT NUMBER: 1801-3361  
DATE: March 2019

DISTRIBUTION OF  
SELECTED VOCs IN  
PERCHED GROUNDWATER  
MARCH 4 AND 5, 2019

PLATE  
4



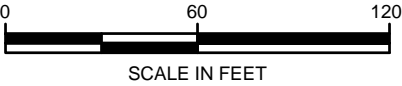




**LEGEND**

- PROPERTY BOUNDARY LINE
- B-10 MONITORING WELL LOCATION (PERCHED ZONE)
- B-5 EXTRACTION WELL LOCATION (PERCHED ZONE)
- DW-1 MONITORING WELL LOCATION (REGIONAL AQUIFER)
- HA-1 SOIL BORING LOCATION
- HISTORICAL EXCAVATION LOCATION
- A A' GEOLOGIC CROSS SECTION LINE

**NOTES:**  
1. BASEMAP SOURCE: GOOGLE EARTH PRO; IMAGE DATE 8/11/2018  
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PROJECT NAME: EFT Enterprises, L.P.  
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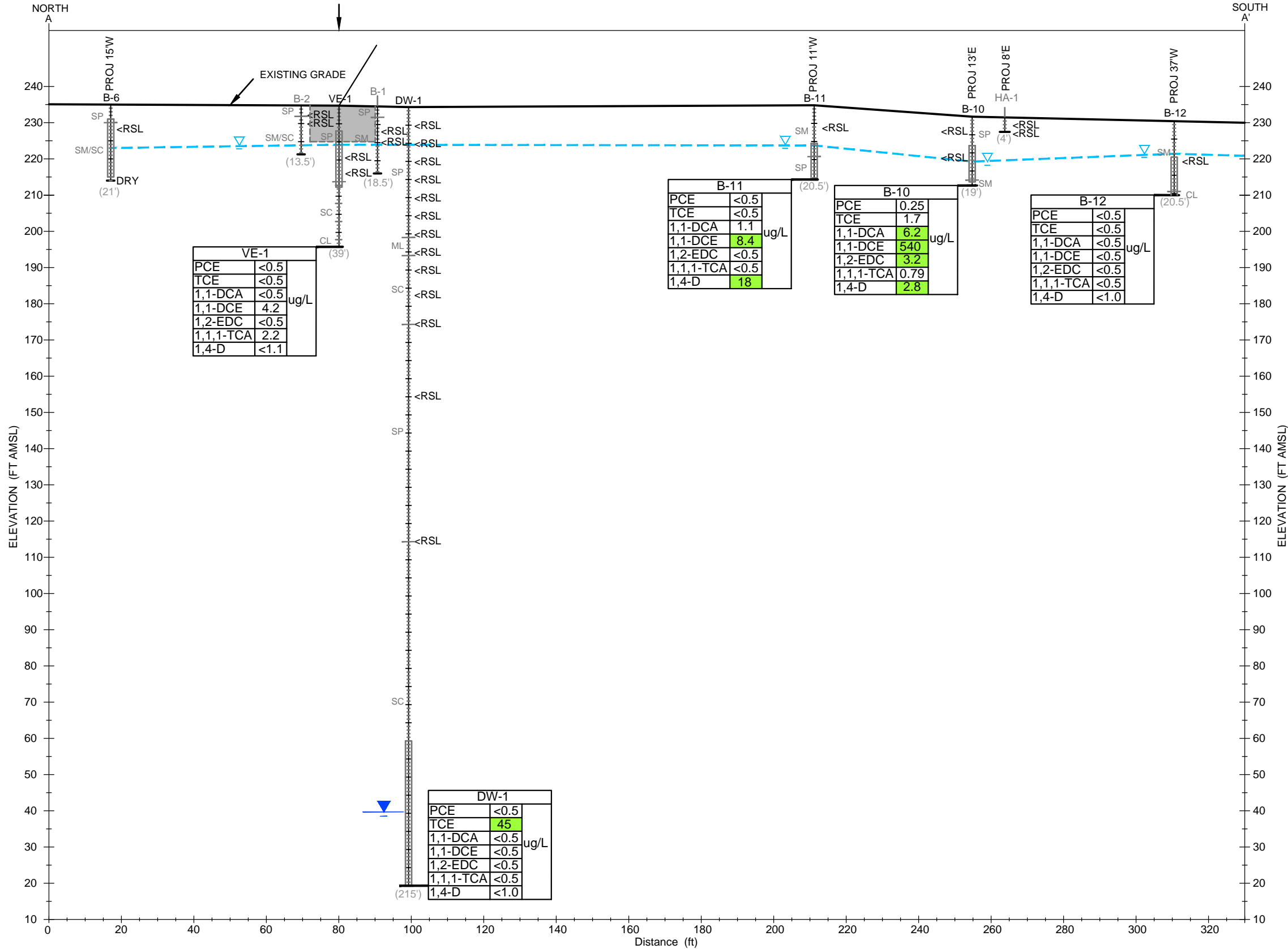
SITE PLAN  
SHOWING GEOLOGIC  
CROSS-SECTIONS

PLATE  
5



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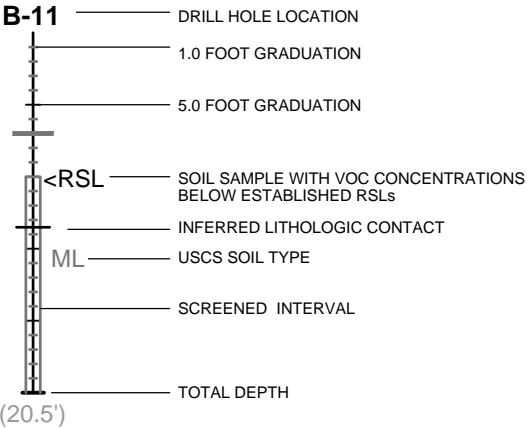
ELEVATION (FT AMSL)



SECTION A-A'

LEGEND

- NS NO SAMPLE COLLECTED  
(FT AMSL) ELEVATION IN FEET ABOVE MEAN SEA LEVEL  
ug/L MICROGRAMS PER LITER  
▽ PERCHED GROUNDWATER ELEVATION (MARCH 4, 2019)  
▼ REGIONAL AQUIFER GROUNDWATER ELEVATION (MARCH 4, 2019)  
SP USCS SOIL CLASS  
USCS UNIFIED SOIL CLASSIFICATION SYSTEM  
APPROXIMATE HISTORICAL EXCAVATION LIMITS



- NOTES:
- ug/L = MICROGRAMS PER LITER.
  - <0.5 = NOT INDICATED AT OR ABOVE THE PRACTICAL QUANTITATION LIMIT.
  - USCS = UNIFIED SOIL CLASSIFICATION SYSTEM.
  - REFER TO HISTORICAL DATA TABLES FOR COLLECTION DATES OF SOIL SAMPLES. GROUNDWATER VOC RESULTS FOR WELLS WHERE SAMPLED ON MARCH 4 AND MARCH 5, 2019.
  - RSL = EPA RESIDENTIAL REGIONAL SCREENING LEVEL
  - VOC = VOLATILE ORGANIC COMPOUNDS

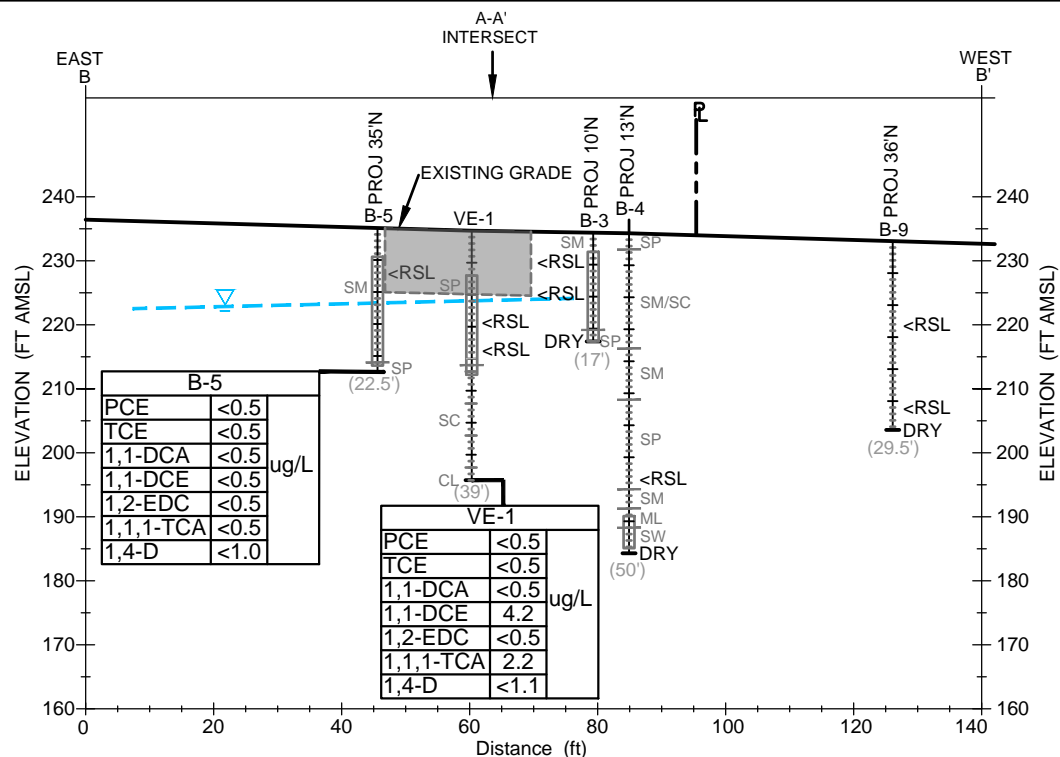
GROUNDWATER SAMPLE ANALYTICAL RESULTS

- PCE = TETRACHLOROETHYLENE  
TCE = TRICHLOROETHANE  
1,1-DCA = 1,1 DICHLOROETHANE  
1,1-DCE = 1,1 DICHLOROETHENE  
1,2-EDC = 1,2 DICHLOROETHANE  
1,1,1-TCA = 1,1,1 TRICHLOROETHENE  
1,4-D = 1,4 DIOXANE  
18 = DENOTES CONCENTRATION WHICH EXCEEDS CALIFORNIA DRINKING WATER MAXIMUM CONTAMINANT LEVELS (MCL). OR NOTIFICATION LEVEL (NL)



PROJECT NAME: EFT Enterprises, L.P.  
3037 Industrial Park Way  
City of Santa Maria,  
Santa Barbara County, CA  
PROJECT NUMBER: 1801-3361  
DATE: March 2019

GEOLOGIC  
CROSS-SECTION  
A-A'



## LEGEND

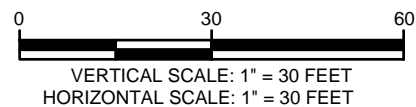
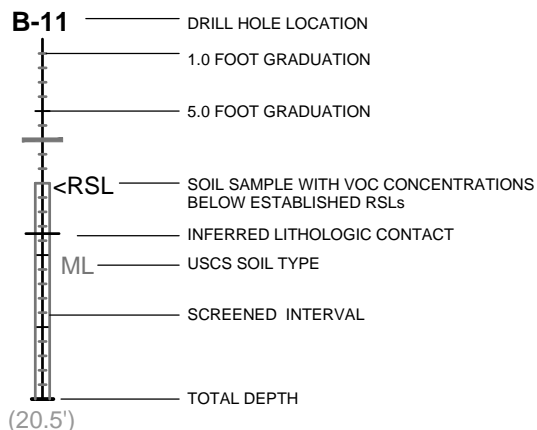
NS	NO SAMPLE COLLECTED
(FT AMSL)	ELEVATION IN FEET ABOVE MEAN SEA LEVEL
ug/L	MICROGRAMS PER LITER
	PERCHED GROUNDWATER ELEVATION (MARCH 4, 2019)
SP	USCS SOIL CLASS
USCS	UNIFIED SOIL CLASSIFICATION SYSTEM
	APPROXIMATE HISTORICAL EXCAVATION LIMITS

### NOTES:

1. ug/L = MICROGRAMS PER LITER.
2. <0.5 = NOT INDICATED AT OR ABOVE THE PRACTICAL QUANTITATION LIMIT.
3. USCS = UNIFIED SOIL CLASSIFICATION SYSTEM.
4. REFER TO HISTORICAL DATA TABLES FOR COLLECTION DATES OF SOIL SAMPLES. GROUNDWATER VOC RESULTS FOR WELLS WHERE SAMPLED ON MARCH 4 AND MARCH 5, 2019.
5. RSL = EPA RESIDENTIAL REGIONAL SCREENING LEVEL
6. VOC = VOLATILE ORGANIC COMPOUNDS
7. NO DRILL HOLE LOG AVAILABLE FOR MONITORING WELL B-9.

### GROUNDWATER SAMPLE ANALYTICAL RESULTS

PCE	=	TETRACHLOROETHYLENE
TCE	=	TRICHLOROETHANE
1,1-DCA	=	1,1 DICHLOROETHANE
1,1-DCE	=	1,1 DICHLOROETHENE
1,2-EDC	=	1,2 DICHLOROETHANE
1,1,1-TCA	=	1,1,1 TRICHLOROETHENE
1,4-D	=	1,4 DIOXANE







**LEGEND**

- PROPERTY BOUNDARY LINE
- B-10 MONITORING WELL LOCATION (PERCHED ZONE)
- B-5 EXTRACTION WELL LOCATION (PERCHED ZONE)
- DW-1 MONITORING WELL LOCATION (REGIONAL AQUIFER)
- HA-1 SOIL BORING LOCATION
- PROPOSED DRILL HOLE LOCATION
- PROPOSED SUB-SLAB SOIL GAS PROBE LOCATION
- PROPOSED GROUNDWATER MONITORING WELL LOCATION

- HISTORICAL EXCAVATION LOCATION
- LIMITS OF MCL/NL EXCEEDANCE IN PERCHED GROUNDWATER

**NOTES:**  
1. BASEMAP SOURCE: GOOGLE EARTH PRO; IMAGE DATE 8/11/2018  
2. ALL WELL LOCATIONS SURVEYED BY CANNON INC.; SOIL BORING LOCATIONS ARE APPROXIMATE



**padre**  
associates, inc.  
ENGINEERS, GEOLOGISTS &  
ENVIRONMENTAL SCIENTISTS

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**SITE PLAN SHOWING  
PROPOSED ASSESSMENT  
LOCATIONS**

PLATE  
**8**